

## INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week  
Gags of the Week  
Philosophy of the Week  
The National Pastime  
Out of Our Mailbag

### Story of the Week

Six friends of Mr. and Mrs. Trav Leer were parked in the driveway of the Leers' home when the latter returned from their vacation.

"Gee, it's nice of you to welcome us this way," happened Mr. Leer.

"Simply a matter of self-protection," disillusioned an office pal. "We decided to visit you before you had a chance to develop your films."

### Gags of the Week

Inmates of a British Columbia prison call it "The Walled-Off Astoria."

Overheard at a party:

"You can get the cutest highball glasses for 10 cents apiece at Hudson's," gaped the hostess. "Hope a lot of mine are broken tonight."

Theresa Talliani, the television thrush, has an enormous range—from high C to low V.

When people start trying to get out of this country, instead of forming lines waiting to get in—then we'll start worrying about the capitalist system.

### Philosophy of the Week

"If money is your only hope for independence, you will never have it. The only real security that a man can have in this world is a reserve of knowledge, experience, and ability."

—HENRY FORD.

"It's good to have money, and the things that money can buy, but it's good, too, to check up once in a while and be sure you haven't lost the things money can't buy."

—GEORGE HORACE LORIMER.

"Too many of us keep our noses so close to the grindstone that we miss the beauty of the universe in which we live. I think life is something more than eating and sleeping and going to the movies and discussing Nellie's new hat. There are so many things to know, so many things to see, so many things to thrill us.

"And yet, the pity is that an overwhelming proportion of people never really live, never really sense the wonder of it all, never give thought to things outside their petty pale of daily routine.

"Let us try to realize the magic of a rose's perfume, the majesty of a city skyscraper, the greatness that is in sacrifice. Then we won't be glued to the grind."

—JEROME P. FLEISHMAN.

"The first requisite of a good citizen of this republic of ours is that he shall be able and willing to pull his own weight."

—THEODORE ROOSEVELT.

### The National Pastime

Inasmuch as AIR CONDITIONING & REFRIGERATION NEWS must serve a number of special interests among its subscribers (merchandising, engineering, service; household and commercial refrigeration, air conditioning, etc.) Editorial Director Phil Redeker has to do a tremendous balancing job every week.

Contentedly and happily "Dope" tries to weld all these diverse-yet-related interests by discussing anything and everything which isn't in the line of duty.

There should be one spot in this weekly newspaper of the industry, we figure, where all of us can gather together on subjects of mutual concern. So "Dope" runs the gamut from jokes to economics, and politics to baseball.

And we're always surprised by reader reactions.

Response to our recent series of baseball anecdotes, for example, has been amazing. And gratifying! Sample:

(Concluded on Page 8, Column 1)

ISSUED EVERY MONDAY AT 450 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1926.



# AIR CONDITIONING & REFRIGERATION News

Vol. 67, No. 7, Serial No. 1230

October 13, 1952

Subscription Price, \$5 Per Year

Registered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879. Trade Mark Registered U. S. Patent Office. Copyright 1952, by Business News Publishing Co.

## Crosley Cuts '53 Refrigerator Line To 9 Models

ATLANTIC CITY, N. J.—Crosley Div. of Avco Mfg. Corp. recently introduced its 1953 Shelvador refrigerator and room air conditioner lines at a distributor meeting in the Ambassador hotel here.

To help cut down dealer and customer confusion, Crosley has reduced its refrigerator line from 16 to nine models. The line, says Crosley, is the shortest in recent years and concentrates more features in each model than ever before.

Only new feature, however, is a "push-button" automatic defrosting on the CAE-8 and CAE-95 (8 and 9.5-cu. ft.) models. On these models the housewife starts the automatic defrost cycle at her own convenience by pushing a button located in the center of the temperature control knob. A thermostat shuts off the power defrost when the cycle is complete.

(Concluded on Page 2, Column 1)

## D. A. Packard Named General Sales Mgr. At Kelvinator

DETROIT—D. A. Packard, Kelvinator household sales manager for the past five years, has been named general sales manager of the Kelvinator Div., Nash-Kelvinator Corp. The appointment was announced by C. T. Lawson, vice president of appliance distribution for Nash-Kelvinator.

Packard, in turn, has announced 11 new executive appointments in the Kelvinator sales organization.

These new appointees are: J. W. Keeping, assistant general sales manager; C. J. Coward, retaining the title of merchandising manager but assuming new responsibilities; W. L. Jeffrey, sales manager of refrigeration and range products; H. L. Travis, manager of retail distribution; H. A. Valencourt, manager of wholesale distribution.

R. A. Demmer, eastern regional manager; F. E. Howell, sales manager, Leonard Div.; F. J. Worden, manager of home freezer sales; J. B. Johnson, manager of laundry equipment sales; W. G. Kronauge, sales manager, special products; and R. L. Runkle, manager of marketing and organization.

Packard's appointment followed the advancement of Lawson from (Concluded on Back Page, Column 1)

## Lonerger To Produce Room Coolers for Admiral

ALBION, Mich.—Lonerger Mfg. Co.'s Refrigeration Div. will manufacture a new line of room air conditioners for Admiral Corp. under a recently-signed contract, it was announced here.

Production of the window units is scheduled to get under way in December or January, according to S. J. Lonergan, president of the company. Details of the contract were not revealed.

Lonerger said the contract will result in employment of up to 250 more workers and better balanced production for his company. Peak production on the firm's current chief item—a line of warm air heaters—comes in the summer, while the air conditioners will be made mainly during the winter, he pointed out.

The new contract is expected to about double total annual production.

## Carrier Offers Low-Cost Home Weathermaker

NEW YORK CITY—A new, low-priced 2-ton year-round residential air conditioning unit and its eight-model line of 1953 room air conditioners in which the air is cooled twice have been introduced by Carrier Corp.

At the same time, Cloud Wampler, president, revealed that a new completely air conditioned plant representing an investment of more than \$7,000,000 will be devoted to the manufacture of the company's 1953 line of residential air conditioning and other unitary equipment.

At a preview showing of its 1953 home Weathermaker model, Wampler declared that the new, space-saving, and less expensive unit is aimed at meeting the snowballing consumer demand for complete air conditioning in homes at every price level.

"The new Weathermaker will sell at the lowest price to date for a single-package cooling and heating unit," he declared.

"This 1953 model brings air conditioning—both winter and summer—within the reach of the average home buyer who can afford an extra \$3.50 to \$5.50 a month on a 20-year mortgage. It is the only unit providing 2 tons of cooling and dehumidifying (Concluded on Page 4, Column 3)

## Plans for Freezer Confirmed by Thor

CHICAGO—Thor Corp. has confirmed industry rumors that it intends to enter the home freezer field.

In announcing a number of sales appointments, the company said it "plans to shortly market a line of home freezers."

The announcement dealt mainly with the appointment of Frank J. Simpson as vice president in charge of sales, Thomas R. Chadwick as general sales manager, Dan R. Nighswander as product manager for Thor washers and ironers, J. Ross Sims to succeed Simpson as southern division sales manager, and Paul J. Buchen to replace Chadwick as central division sales manager.

## 27 Cold Storage Firms Keep Blood Serum Free

WASHINGTON, D. C.—Blood serum supplies are now being stored in 27 public refrigerated warehouses across the nation as a safeguard against possible large scale bombing of American cities, according to the National Association of Refrigerated Warehouses.

The serum, which is in the form of blood groupings and blood typings, is being handled free of charge by warehousemen in cooperation with the Civil Defense Program.

The storage space allotted for the serum is of the cooler room variety (Concluded on Back Page, Column 2)

## Albert A. Feinberg, UsAircro President, Dies

MINNEAPOLIS—Albert A. Feinberg, president and one of the founders of United States Air Conditioning Corp., died Oct. 7. He was 59.

Surviving are his widow, a son, David, who is vice president of the company, a daughter, a brother, and three sisters.

## Gibson Presents Room Conditioners, More Freezers

CHICAGO—A new and longer line of food freezers consisting of four upright and three chest-type models and a new room air conditioner line made up of  $\frac{1}{2}$ ,  $\frac{3}{4}$ , and  $\frac{5}{8}$ -hp. units were presented by Gibson Refrigerator Co. at its national sales convention held last week at the Hotel Sherman here.

The company also introduced an 11-model refrigerator line which includes units in the "Defrost-Matic" group several with the new Gibson "Swing'r Shelf," and two (one 9-ft. and one 11-ft.) with a new interior color—cameo cream with gold trim.

At the same time, Gibson unveiled eight 1953 electric ranges. Among features of the line are large "Do-All" ovens with concealed lower oven (Concluded on Page 29, Column 1)

## Frigidaire Has 2 New Chest-Type Freezers

DAYTON—Two new chest-type home freezers featuring flat-top construction and 5 in. of fibrous glass insulation in the lid have been added to the Frigidaire line, H. F. Lehman, general sales manager of Frigidaire Div., General Motors Corp., announced recently.

One freezer has 9.2-cu. ft. capacity (HR-92) and the other 13.2-cu. ft. capacity (HR-132). The company also makes an 18-cu. ft. box.

Both models are counter high and have new streamlined styling. The flat-top construction provides extra work surface.

The new top, with its thick insulation (Concluded on Back Page, Column 3)

## NPA To Relax Rules On Construction May 1

WASHINGTON, D. C.—As of next May 1, many construction regulations will be relaxed, the National Production Authority ruled recently in issuing a new Direction 8 to Controlled Materials Plan Regulation 6.

At that time, the amounts of controlled materials that may be self-authorized for commercial and most other types of construction will be lifted. The ban on recreational construction will also be lifted.

Richard A. McDonald, NPA Administrator, said the direction was (Concluded on Back Page, Column 1)

## Muntz Gets Evanston Plant for Room Coolers

CHICAGO—Announcing that it will enter the room air conditioner field with  $\frac{1}{2}$ ,  $\frac{3}{4}$ , and 1-ton units, Muntz TV, Inc. reported it has acquired 45,000 sq. ft. of production facilities in Evanston, Ill., where complete manufacture and assembly will be carried out.

The company expects to have units ready for the market by early spring. They will be marketed through Muntz TV sales outlets.

A company executive said branch offices will start taking orders for a  $\frac{1}{2}$ -ton unit about Jan. 1. He said the unit will sell for a good deal less than prevailing prices.

At the same time, it was announced that Earl W. Muntz has resigned as president of Muntz Car Co. in order to devote his time to Muntz TV and the new line of air conditioners.

## 72 Will Display At Conference In Miami Dec. 5

Exhibits, Talks Scheduled For 3-Day Conclave for All Industry Members

MIAMI, Fla.—Seventy-two companies are scheduled to set up educational displays in the Municipal Auditorium here for the 10th Refrigeration and Air Conditioning Educational Exhibit and Conference on Dec. 5, 6, and 7.

The conference is being sponsored by the Refrigeration Equipment Manufacturers Association and the Refrigeration Service Engineers Society with the cooperation of the Refrigeration Equipment Wholesalers Association and the Refrigeration and Air Conditioning Contractors Association.

Exhibits will be open to anyone in the industry during the following hours: Dec. 5—1 to 5 and 7 to 10 p.m.; Dec. 6—10 a.m. to 5 p.m.; and Dec. 7—12 noon to 4 p.m.

Speakers who will appear on the three-day program together with their subjects include the following: "Installing a Window Unit Air Conditioner" by Carl F. Zauner, service manager, Remington Corp.

"Estimating and Installing Residence Air Conditioning" by Lee A. Miles, refrigeration engineer, Mueller Furnace Co.

"Facts About Driers—Old and New" by Dr. W. O. Walker, director, industrial chemical research, University of Miami.

"The Lithium Bromide Absorption Refrigeration System" by John E. McGaughey, Jr., field engineer, Carrier Corp.

"Textile Air Conditioning" by Frederick Boxall, air conditioning engineer, The Bahnsen Co.

"Installation Service and Main- (Concluded on Page 4, Column 1)

## RACCA Plans Meeting In Miami Dec. 3-5

CHICAGO—The Refrigeration and Air Conditioning Contractors Association will hold its seventh annual convention at the Casablanca hotel in Miami Beach, Fla. on Dec. 3, 4, and 5, association executives have announced.

The convention will open with a board of directors meeting on Wednesday, Dec. 3. On Thursday, Dec. 4, general sessions will be held in both morning and afternoon, while the luncheon will feature a talk on what air conditioning has done for the Miami area.

On Friday morning, RACCA will hold its annual business meeting and election of officers. In the afternoon, the association will join with the Refrigeration Equipment Manufacturers Association and the Refrigeration Service Engineers Society to attend a two-hour business administration (Concluded on Back Page, Column 2)

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PUSH-BUTTON automatic defrosting is feature of this Crosley 8-cu. ft. refrigerator. Defrost button is in center of temperature control panel.



FILTER is easily accessible by opening hinged lid of this 1/2-hp. Crosley room air conditioner.

## Crosley Refrigerator, Room Cooler Line--

(Continued from Page 1)

pleted and simultaneously restarts the refrigeration unit.

Four room air conditioners, ranging in size from 1/2 to 1 hp., were introduced. Each is capable of being installed under normal installation conditions in 20 minutes. The three larger ones have thermostats as standard equipment. The 1-hp. unit is new to the line.

Special cabinet design with a special lid permits quick and easy filter removal. The filter is removed by opening the hinged top.

Refrigerator models, with their sizes and suggested list prices, are as follows: RE-7, 7 cu. ft., \$199.95; DE-7, 7 cu. ft., \$229.95; RE-8, 8 cu. ft., \$249.95; CAE-8, 8 cu. ft., \$289.95; RE-9, 9 cu. ft., \$299.95; CAE-9,

9.5 cu. ft., \$369.95; CAE-11, 11 cu. ft., \$439.95; TDAD-12, 12 cu. ft., \$499.95; and TCAD-12, 12 cu. ft., \$519.95.

The following features are in all models of the line: horizontal freezer with capacities ranging from 28 to 77 lbs., from three to five shelves in the door, quiet, trigger-action latch mechanism, frozen storage trays or meatholders, "tilt-out" and "pop-out" ice trays, and high grade structural polystyrene plastic for interior trim and freezer doors.

Automatic defrosting appears on five models. In addition to the two "push-button" models, the three largest models are equipped with automatic defrosting controlled by time clock and thermostat.

"The automatic defrosting is the

same time-proven power defrost system Crosley introduced in 1950," declared Joseph L. Armstrong, Crosley sales manager for refrigeration.

"It employs electric heating elements in direct contact with the outside of the freezer and defrosts so quickly and completely that frozen foods inside the freezer have no chance to thaw."

### RESTYLED EXTERIORS

The exterior appearance of the 1953 Shelvadors has been heightened by restyled and redesigned hardware and name plates. The "Soft-Glo" interior color treatment, introduced by Crosley last year, has been retained in the "custom" models (the five with automatic defrosting).

In addition, Crosley has added a "Sea Mist" color treatment to the standard models for the first time. "Sea Mist" is a blending of a pastel gray-green with accents of gold and white.

With this addition, Crosley has color treatment in its entire line except for the lowest-priced model.

All models except the lowest-priced model, have either single or twin crispers and have butter safes. A thermostatically controlled adjustable butter safe, removable for cleaning, is a feature of the CAE-11, TDAD-12, and the TCAD-12.

### FOUR SIZES OF ROOM COOLERS

The 1953 room air conditioner line marks the second year that Crosley has presented this appliance. The new 1-ton model, the ACE-100, is capable of dehumidifying and cooling rooms up to 600 sq. ft. in size. It measures 15 1/2 in. high, 27 in. wide, and 27 in. deep. It extracts 3.2 pints

of moisture from the room's atmosphere per hour.

The 3/4-ton unit, ACE-75, for rooms up to 485 sq. ft. is the same size as the 1-ton model, but it extracts 2.5 pints of moisture per hour and circulates 700 c.f.m.

The 1/2-ton model, ACE-50, for rooms up to 325 sq. ft., measures 13 1/2 by 27 by 27 in., extracts 1.8 pints of moisture per hour, and circulates 560 c.f.m. The 1/2-ton unit, ACE-33, for rooms up to 230 sq. ft., measures 13 1/2 by 22 1/2 by 26 1/2 in. It extracts 1.3 pints of moisture per hour and circulates 470 c.f.m.

### FIVE-YEAR WARRANTY ON COMPRESSOR

Permanently lubricated motors are used in all Crosley models. The new type motor compressor assembly has a five-year warranty. A new method of speedy and completely weather-tight installation is used with all models. All are styled in moss-green and mountain-gray.

Three directional grille louvers permit control of the direction of air flow. Faster cooling is assured through a unique air discharge arrangement, according to Ted Nemes, Crosley air conditioner sales manager. Because of this arrangement, maximum removal of moisture from the air can be obtained, he said.

F. F. Duggan, Crosley general sales manager for appliances, declared that the new refrigerator line was designed and styled after a nationwide survey of Crosley distributors, dealers, and owners.

"This survey gave us the prices, sizes, and features the public wants," he explained. "We concentrated all these factors in a short line to put an end to the confusion of recent years caused by many-model lines.

### SHORTENED LINE ELIMINATES CONFUSION

"Neither the retailer nor his customer have been able to get a clear cut picture of the refrigerators offered for sale. By shortening and concentrating our 1953 line, we have tried to eliminate confusion, and, in addition, Crosley is presenting more models containing more features that consumers want at prices they are willing and able to pay."

Commenting on business conditions ahead, John W. Craig, general manager of Crosley and a vice president of Avco Mfg. Corp., asserted:

"During the coming months, manufacturers, distributors, and dealers, all are going to have to use their ingenuity to hold against rising costs of doing business, even granting some price increases, if they are once again to operate on an economically sound margin. Overhead as well as manufacturing costs are up.

"We feel that Crosley's plan for a short product line affords opportunity for savings to distributors, dealers, and consumers, as well as manufacturer. At the manufacturing level, with fewer models we can increase volume on each model and effect savings. At the distributor and dealer levels, a short line means lower inventory and selling costs."

Craig also believes that as a result of the steel strike and subsequent increased costs of materials and labor,

"prices have simply got to go up."

"There is no more 'give' in the price structure," he said. "Manufacturers, distributors, and dealers, have all been operating on dangerously close margins for the past year. They are in no position to absorb any more cost increases without a rise in sales prices."

He also expressed the opinion that steel will remain in short supply on into the second quarter of 1953. "It is very questionable if production will meet with demand until steel again appears in free supply," he said.

## 200 Appliance Dealers, Utility, Food Stores Join In Freezer Promotion

ERIE, Pa.—Two hundred appliance dealers in two counties, Pennsylvania Electric Co., Home Owned Food Stores, Inc., and more than 20 area supermarkets and independent grocers took part in a two-week freezer-food promotion aimed at boosting home freezer sales and market business.

The utility provided freezer dealers with "membership cards" for distribution to customers and shoppers. The cards entitled consumers to a 10% discount on the list price of frozen foods when purchased in quantities of \$20 worth or more at any Home Owned Food store or supermarket affiliated with HOFs.

The cards also entitled consumers to buy wholesale meat cuts at OPS wholesale prices or less. In addition, customers could have the cuts processed for their freezer at a minimum cost.

Consumers were told that buying under this plan enabled them to purchase a well-known brand of home freezer from a reputable dealer, have the freezer financed on convenient terms after a small down payment, and get \$100 worth of food with the freezer.

A Penelec bulletin announcing the promotion stated that "Well-informed authorities agree volume purchase of meats and frozen food will produce savings to pay for a freezer in a reasonable length of time."

## New NPA Form To Speed Priorities Help Requests

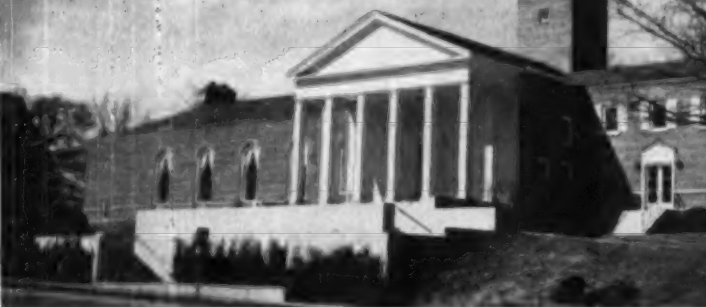
WASHINGTON, D. C.—A new application form designed to aid businesses to obtain special priorities assistance needed to expedite production has been issued by the National Production Authority.

Called form NPAF-138-Revised, it is entitled "Request for Priorities Assistance." Copies may be obtained from Department of Commerce field offices or from the NPA here.

Use of the new form will provide NPA with the type of information required to enable it to take action on requests for assistance.

Requests for priorities assistance must be mailed to NPA or to one of the claimant agencies listed on the back of the form.

## VERSATILE Acme EVAPORATIVE CONDENSERS fit wide range of applications



The First Church of Christ Scientist in Birmingham, Alabama.

Two recent installations of Acme Evaporative Condensers show the wide range of applications for which they are ideally suited. The ability to conserve water makes the operation very economical, while the functional design assures complete hot weather comfort.

One installation was made in the First Church of Christ Scientist in Birmingham, Alabama, by the Hardy Corporation. The main auditorium seated 650 persons and a Sunday School room accommodated 148 more. Despite the variable load and Birmingham's hot climate the FP-60 Acme Evaporative Condenser has been highly efficient and completely satisfactory.

A completely different installation was made by the Krauss Heating and Ventilating Company, at the Gulf Winds Restaurant in St. Petersburg, Florida. An FP-30 evaporative condenser serving as an important component of the air conditioning system, was installed.

The air conditioning added much to the comfort of the patrons of this beautiful restaurant. Despite the unusual hardness of the water, the equipment is satisfactory in every respect, saving over 95% of the water used.

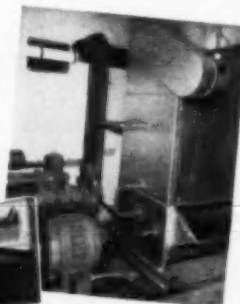
Write for more complete details on the advantages of Acme Evaporative Condensers

The Gulf Winds, popular St. Petersburg, Florida restaurant.



FP-30 Evaporative Condenser installed at the Gulf Winds Restaurant.

FP-60 Evaporative Condenser installation at the First Church of Christ Scientist.



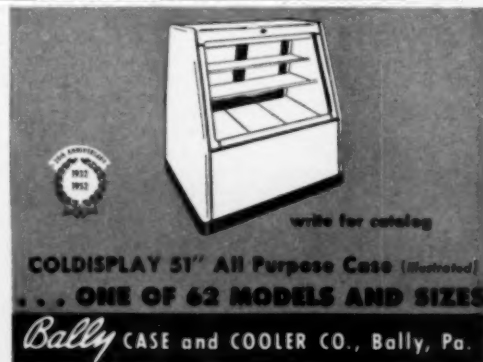
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## Miami Educational Conference--

(Concluded from Page 1, Column 5)  
tenance of Cooling Towers and Evaporative Condensers" by Edward R. Magnus, chief engineer, Snowhill Mfg. Co.

"Centrifugal Compressors (As applied to larger tonnage installations)" by E. H. Michel, manager, direct sales, Air Conditioning and Refrigeration Div., and Paul Venable, manager, Eastern Service and Engineering Div., Worthington Corp.

"The Use of the Suction Pressure Recording Gauge in Diagnosing and Analyzing Service Problems" by John H. Spence, service manager, Hummann Refrigerator Co.

"Air-Cooled Condensers, Large and Small" by S. Charles Regal, general sales manager, Kramer Trenton Co.

A one-hour question and answer forum conducted by a panel of industry experts will be a feature of the program on each morning of the three-day meeting.

Business meetings in connection with the 15th annual convention of the Refrigeration Service Engineers Society will be held on Dec. 5 and 6.

The 7th annual meeting of the Refrigeration and Air Conditioning Contractors Association will be held at the Casablanca hotel, Miami Beach, on Dec. 4 and 5, with a meeting of the RACCA board of directors scheduled for Dec. 3. Annual election of officers will take place on Dec. 5. More details on the RACCA convention appear elsewhere in this issue.

On Friday, Dec. 5, a two-hour program on business administration and sales training for the contractor and

service engineer has been arranged as a special feature of the conference through the cooperation of RACCA. The program will be held in the auditorium from 1 to 3 p.m.

R. S. Lafferty, vice president of Hill-York Corp., will talk on "Is A Profit Justified?" Gregory P. Marburgh, branch manager of Electrolux Corp. in Miami, will speak on "Sales Training Techniques." Ernest L. Foss, sales and advertising manager of Pan American World Airways, Latin American Div., will discuss "Advertising."

Annual meeting of REWA will be at the Hollywood Beach hotel, Hollywood, Fla., on Dec. 8. Also taking place at Hollywood will be meetings of the REWA board of directors, REWA board of directors, product section meetings of REWA, and joint REWA-REWA golf tournament, cocktail party, banquet, and membership meeting.

### ASA Award Given To Lawler of Worthington

NEW YORK CITY—M. M. Lawler, assistant vice president, Worthington Corp., has been awarded a certificate of service by the American Standards Association in recognition of his work in the development of American Standards.

Lawler is a member of the ASA Standards Council, representing the Air Conditioning & Refrigerating Machinery Association. He has been especially active as the ACRMA representative on ASA Committee Y53—Refrigeration Nomenclature.

## Carrier Line--

(Concluded from Page 1, Column 3)  
capacity plus winter heating in a single closet-size cabinet. It requires minimum floor space, about 3 ft. by 3 ft.—and is only a little more than 5 ft. high.

While retail prices of the new unit will vary with the amount and local cost of installation work required, Carrier's price to its distributors will be about 25% less than the current smallest Weathermaker unit, it was stated by William A. Lake, Carrier's promotion manager for residential air conditioning.

### 8000 MORE THAN HOT-AIR SYSTEM

"We anticipate that this new unit will cost only \$700 to \$1,000 more—any under \$800 on the average—than the cost of a good forced, warm-air heating system, installed."

This new unit is entirely sound-proofed and heat-proofed. New features include heating with any type of gas, or with oil. For those sections of the country where water is in short supply or is expensive, the unit is available with air-cooled refrigerant condensing which does away with the need for water or for a cooling tower, the company said.

Both heating and cooling are controlled by the flick of a switch, either on the unit or from a separate thermostat control anywhere in the house.

All sections of the unit can be reached from the front by removal of a panel. Air enters the unit from either the side, back, or bottom and can be distributed through the house in any of four directions. This pro-



AVERAGE Weathermaker installation takes up about 9 sq. ft. of floor space and is adequate for average three-bedroom house.

vides the greatest flexibility of installation of any air conditioning unit now available, the company claims.

### 2-TON UNIT ADEQUATE FOR 3-BEDROOM HOME

The unit's 2 tons of refrigeration capacity are said to be enough for average three-bedroom homes up to 1,200 or more square feet in size in any climatic areas. Other Carrier residential year-round units are available in 3, 5, and 7½-ton sizes.

The new room air conditioner draws air in through the sides of the front grille and passes it twice through the cooling coil and filter before releasing it into the room. This provides two-pass cooling as well as two-pass dehumidification and filtering. The air is also handled at low velocity, which has the added effect of making the new Carrier unit the quietest room air conditioner available today, according to Wampler.

Two other exclusive features, a "hideaway design" and a "color blend" front let the units fit unobtrusively into a room and meet all possible installation restrictions in home or office, Wampler said.

### NO MAJOR EXTENSION INTO A ROOM

The new Carrier unit can be installed in a window so that its grille extends only as far as the line of the curtains or drapes. This is accomplished by eliminating all air inlet or outlet grilles from the sides, top, and bottom of the unit and completely enclosing and insulating the unit in a solid box of girder construction. No longer need it go half in and half out a window.

This also means that it can be set into a wall, at any height, with only the decorative front grille extending into the room. Or it can be set in the top of a window or even in a transom.

The decorative front panel is entirely circled by finned air outlets which insure against drafts anywhere in the room. The unit was styled by Lurelle Guild and the front grille is finished in a neutral "color blend" material which picks up and harmonizes with surrounding colors.

Despite the extra features, modern manufacturing techniques will make it possible to price the new Carrier units on a competitive basis, Wampler said. Sales of the new model to consumers will start late in October.

### EIGHT MODELS IN LINE

The new line will offer eight models. Window units will be in ½, ¾, 1, and 1½-hp. sizes, with deluxe models in the two larger sizes. Console models will be in 1 and 1½-hp., plus a 1-hp. console with water-cooled condensing where an outside air supply is not available.

The versatility of the new window models also means that they can be operated entirely within a room, with the back inlet fitted to the window with a special air-tight rubber gasket. This makes possible their use with casement windows with no alteration to the window frame; on top of closets in hotels or camps; on a portable stand for rental use in hospitals, hotels, or motels; or suspended from the ceiling where space-saving is important, it was said.

The ¾ and 1-hp. units provide a "quick cooler" which will make warm rooms rapidly comfortable by building a pool of cool air from the floor upward. Once the air around the occupants has been cooled, the units can be switched to normal operation.

All models are equipped for drawing in outside air or room air. The Carrier Humitrol on the three larger models can be set for even greater



"HIDEAWAY DESIGN" of Carrier's room air conditioner eliminates the need for half-in, half-out window installation, so the unit extends into room only to the drapery line.

cooling for quick pull down of temperature in crowded rooms. On the two larger models it can be set for greater moisture removal on extremely humid days.

Regarding Carrier's new plant, which contains approximately 400,000 sq. ft. of space, Wampler said that Carrier has recently completed arrangements for the purchase of yet another 400,000 sq. ft. that will be used for a combination of manufacturing, research, office, and warehousing purposes.

Wampler pointed out that 50% more residential cooling and heating units were sold by the industry this year than in 1951 and added that Carrier expects a 100% increase in this phase of its business next year. He predicted that year-round air conditioned homes in the \$10,000 price class will be available very soon with Carrier's new, less expensive unit.

"Furthermore," he said, "I believe that before very long speculative builders will place their bets only on fully air conditioned dwellings."

Sales of the new room air conditioners will start this month, with 1953 output initially scheduled at 55% higher than the current year's production. Production schedules for the new year-round residential units will show an increase of over 100%.

## Dealers Should Use Product-Superiority Angle as Reason-To-Buy

MINNEAPOLIS—Retail salesmanship in the appliance field today is missing the boat when it neglects to use the product-superiority story developed by the manufacturer, C. J. Coward, Kelvinator merchandising manager, told the International Association of Electrical Leagues.

He spoke at the group's 17th annual conference held here recently.

Electrical leagues can exert an important influence on dealers who have strayed away from the fundamentals of good business practice, Coward said, especially in helping the dealer to make the most of the basic buying reasons inherent in a well-designed product.

"The manufacturer who hasn't furnished the retail salesman with a basic reason why customers should buy his product in preference to other brands is treading on pretty thin ice," Coward said. "But when the sales story is available, the dealer should make sure his salesmen take advantage of it."

"I sincerely believe that many of us in business today are overdoing our criticism of retail salesmanship," Coward said. "The man who makes the statement that salesmanship is bad today, is wrong. There is good salesmanship today, and there would be much more if the retailer made sure that his retail salesmen used the strong product sales stories developed by the manufacturer."

Coward said electrical leagues can influence the dealer to do three things:

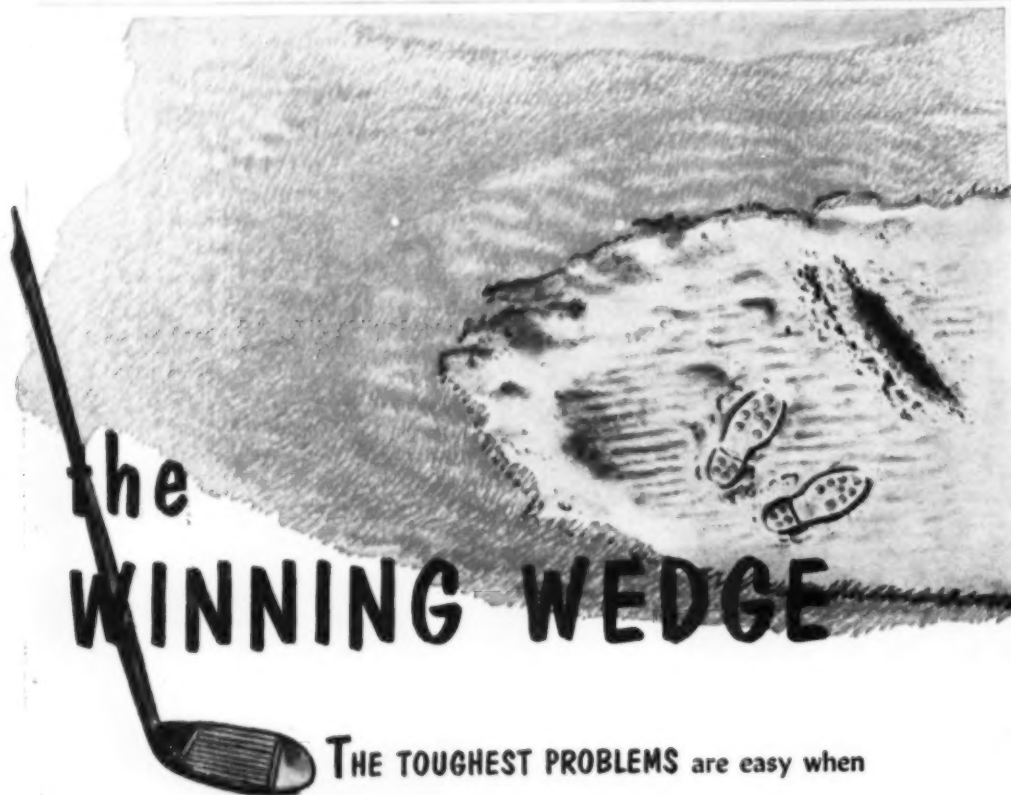
1. Make sure his salesmen understand and sell the basic "reason-why" customers should buy the specific product he is selling, rather than the product of the dealer down the street.

2. Make sure his salesmen use the compelling "action" devices manufacturers have developed at considerable expense, for point-of-sale demonstration.

3. Conduct his business in a manner that builds customer confidence and faith in all his products.

### Buffalo Firm Files Name

BUFFALO, N. Y.—A business name has been filed in the Erie County clerk's office for the Niagara Refrigeration Equipment Co. by Daniel A. Sperrazza.



**THE TOUGHEST PROBLEMS** are easy when proper knowledge and experience get in there and pitch. Tubing problems, too, are best solved by experts—professionals in their own right. Penn Brass & Copper Company, well-known for quality tubing for over a quarter of a century, has the technical facilities and deep-reaching experience to help you choose the right tubing for your needs. Precision drawn and annealed to strict specifications, Penn seamless tubing is always clean, bright, and uniform in wall thickness. Insist on PENN—the tubing unmatched for quality.

For informative refrigeration literature, write "Dept. CR-7."

QUALITY TUBING HAS A "PENN NAME"



**PENN BRASS & COPPER COMPANY**  
ERIE • PENNSYLVANIA • TELEPHONE 3-1164



# PROOF

**THAT NORGE  
PAYS OFF  
FOR THE DEALER!**



## NORGE ELECTRIC RANGES

8 models in all—\$169<sup>95</sup> to \$359<sup>95</sup>

**FIRST** with Tele-Speed Lights — tell at a glance which cooking speed is on!

**FIRST** with Pick-A-Pan Cabinets — end "pan groping" forever!

**FIRST** with Blended Heat Oven — bakes with the electricity off  $\frac{3}{4}$  of the time!

**NORGE is the only  
full line major appliance manufacturer  
offering both Gas and Electric Ranges!**

## NORGE GAS RANGES

12 models in all—\$99<sup>95</sup> to \$289<sup>95</sup>

**FIRST** with complete electric ignition (won Home Safety Award)

**FIRST** with Pick-A-Pan Cabinets—end "pan groping" forever!

**FIRST** with Balanced Heat Oven—ends "hot" and "cold" spots



*Don't wait!  
Line up with the  
Leader. Call your  
NORGE distributor  
today!*

# NORGE



Refrigerators



Gas Ranges



Home Freezers



Automatic Washers



Electric Ranges



Wringer Washers



Water Heaters

**DIVISION OF BORG-WARNER**  
MERCHANDISE MART, CHICAGO 54, ILLINOIS



THESE TWO BEAUTIES helped Van Winkle-Stagg, Inc., Evansville, Ind., premiere the new Norge upright freezer as part of the firm's twenty-fifth anniversary celebration.

## Potent Promotion

### Dealer's 'Silver Jubilee' and 'Premiere' of Norge Upright Freezer Combine To Sell 100 Appliances

EVANSVILLE, Ind. — A "Silver Jubilee" celebration that featured the retail "premiere" of the new Norge Jet Freeze upright freezer here netted sales of 100 Norge major appliances in less than a week for Van Winkle-Stagg, Inc. during August.

This is what happened.

Van Winkle-Stagg, an old established Evansville firm, was celebrating its 25th anniversary in conjunction with the opening of an enlarged and remodeled store.

Norge had just introduced its new Jet Freeze upright home freezer to the trade at the Chicago Summer Furniture Market.

The Sutchiff Co., Norge distributor in Louisville, Ky., asked by Van Winkle-Stagg to help in the anniversary promotion, suggested that the new freezer be given its retail "premiere" at the Evansville opening.

With help from the Norge home office, plans were carefully developed

for tie-in support from all quarters. Newspaper spreads, preceded by "teasers," and radio-spot ads were used to interest the public in the coming event.

The opening was timed to coincide with the regularly scheduled meeting of the Evansville Chamber of Commerce and Kiwanis club. At the suggestion of Van Winkle-Stagg, this was turned into a joint meeting with Richard C. Connell, Norge national sales manager, as the featured speaker.

Jessie Cartwright, home economics advisor to Norge, was booked for radio interviews during the Jubilee, and she agreed to supervise "on the floor" demonstrations of all Norge appliances on display at Van Winkle-Stagg.

O. M. Calvert, Norge district representative, supervised other local promotions. Taking advantage of a local beauty contest, organized in conjunction with the Evansville Police Circus, he secured the services of the six contestants for the Jubilee celebration.

Van Winkle-Stagg provided traffic-catchers including major door prizes, gas-filled balloons, decanters for women guests, cigars for the men, and refreshments for all.

On the opening day, Connell arrived with executives of the firm involved, city officials, and chamber of commerce dignitaries. He was escorted to the Van Winkle-Stagg store for the ribbon cutting ceremony that kicked off the Silver Jubilee. This part of the firm's celebration was the subject of a 15-minute radio broadcast.

In front of the store, on a decorated truck, Van Winkle-Stagg placed a new Norge Jet Freeze loaded with popicles for the crowd, and surrounded it with the local beauties competing for the Evansville Police Queen title, who gave out the popicles. A loud speaker, an announcer, and a steam calliope were located behind the truck.

The freezer itself shortly became the "star" of the show. It stood in the sun for days—at temperatures seldom below 100°—and was opened every few minutes to deliver more "pops" to the crowds. There was no dripping, little condensation, and the popicles had to be broken apart, Calvert reported.

From the opening of the celebration to the end, newspaper stories and

pictures appeared daily in the local press. Although originally scheduled for three days, the Jubilee had to be increased to five to handle the volume of visitors, which eventually passed the 6,500 mark.

As a result of the success of this venture, the Evansville dealer Jubilee may serve as a pattern for Norge dealer "sales carnivals" throughout the country, David H. Kutner, director of advertising and public relations for Norge, declared.

Kutner pointed out that while only the new upright freezer was pushed during the Jubilee, the net effect of the promotion was to move the whole Norge line.

### Here's a Home Freezer Use We Bet You Never Thought Of!

ANN ARBOR, Mich. — A home freezer is helping University of Michigan botany students learn their lessons.

Flowers are picked during the summer in full bloom and then stored in the freezer. When they are needed for study—any time during the fall or winter—they are removed from the freezer, still in full bloom and with their natural fragrance.

Associate professor Dr. Elzada Clover says the fragrance will last from 10 to 60 minutes after removal from the freezer.

"This storage method gives the students the tremendous advantage of being able to examine the flowers as they look in their natural state when the flowers aren't blooming outside," Dr. Clover explained.

By the time the flowers thaw out and wilt, the students are ready to dissect them for further detailed study.

## Cut the high cost of living with the (Name of Plan) FOOD CLUB PLAN!

HERE'S WHAT YOU GET:



U.S. Choice Beef and Pork

At Quantity-Discount Prices!

Freezer also stores vegetables, fruits, and other food items.

Freezer also stores frozen meats, poultry, and fish.

Freezer also stores frozen fruits and vegetables.

Freezer also stores frozen desserts and ice cream.

Freezer also stores frozen breads and pastries.

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## FROZEN FOODS: Forecast Is for More And Better Products

CHICAGO—Discussing the introduction of frozen foods into retail markets while reviewing "100 Years of Food Distribution," Ned Fleming, president of Fleming Co., Topeka, Kans., told a food symposium:

"Undoubtedly (frozen foods) will continue to grow in favor. Complete meals in frozen form will be a definite possibility in the future, but less bulky and less costly refrigeration and methods of transporting frozen foods are needed."

He forecast, also, "continued development and increase in the use of concentrated foods, as best illustrated by the success and acceptance of concentrated orange juice."

The symposium was held during observance of the Centennial of Engineering which brought 30,000 scientists, engineers, and technologists, representing 64 professional societies, to Chicago for a 10-day commemoration of the 100th anniversary of the founding of the nation's first civilian engineering society.

Fleming pointed out that development of refrigeration opened up the possibilities for wider distribution of perishable foods. He asserted: "Without refrigeration, such distribution would have been impossible."

This subject was also touched on by another speaker, John Holmes, president of Swift & Co., in noting that the present-day frozen food industry is the result of nearly half a century of engineering and scientific research.

Development of home freezers and refrigerators with freezer compartments, and the food market with its open freezer display case, he characterized as "all part of a new and fascinating story of progress in food processing and distribution."

In reviewing this progress, Holmes said development of mechanical refrigeration and the refrigerator car and the improved and extended system of rail transportation "made meat packing a mass production and distribution industry."

"It opened the way for a movement of highly perishable food from the great producing areas of the west to the consuming markets of the east. Broad distribution of all perishables by rail and truck followed, providing out-of-season foods for all sections of the country."

The frozen food industry, Holmes continued, has helped to iron out the "seasonal" marketing problem in many foods—fish, fruits, vegetables, fruit juices, etc.

There has been a continuing improvement in quality, he added, due to better handling, improved blanching methods, new varieties of fruits and vegetables. A new practice involving pre-cooling such items as peas in the field before they are moved to processing plants has produced a more acceptable product.

Many cooked foods, including complete meals, soups, and bakery goods seem to offer great possibilities in the frozen food field, he stated. "Growth of the frozen food business has been remarkable," he said. "Buying jumped 11% from 1949 to 1952. Leading this parade are frozen juice concentrates."

"Only 16% of U. S. families used this product in 1949. By April of this year, 1952, this figure leaped to 63%."

Other sizable increases during this period were in sales of frozen fish, poultry, meat, cooked foods, and specialty items."

Charles Glen King, scientific director of the Nutrition Foundation, cited the development of frozen canned citrus juices as one of three major advances in our food supply in which chemical and engineering research have played a large role.

"Frozen canned orange juice, lemonade, and lime juice," said King, "are now available to a large fraction of the American public, with attractive qualities of flavor and color and with an assured vitamin content roughly equal to the fresh juice."

"The advantages to the public are genuine in terms of convenience, pleasure, and health at low cost, and citrus farmers have gained greatly by the expanded market."

### Maranz Heads Freez King Board, Dick Elected Pres.

CHICAGO—Leo Maranz has been elected chairman of the board, Freez King Corp., it was announced.

Maranz will be succeeded as president, the position he formerly held, by George M. Dick. Dick moves up from the position of vice president and general manager.

In addition to his position with Freez King, Maranz will remain as president of Taste-Freez Corp. of America, an international chain of soft ice milk stores comprising approximately 500 stores throughout the United States, and in Puerto Rico, Canada, and Hawaii.

Freez King manufactures commercial freezers used in the production of ice cream and frozen custard.

## NARDA Basic Line-A-Year Plan Could Benefit Manufacturer, Dealer Alike

CHICAGO—All factors in the industry stand to benefit if manufacturers adopt the proposal of the National Appliance & Radio-TV Dealers Association for one basic line of major appliances and television receivers a year, according to Mort Farr, president.

Discussing this proposal at NARDA's recent mid-year meeting held here, Farr said:

"The rapid changes in tube sizes and recent material restrictions may have made it necessary for television to be brought out more frequently in the past. Materials restrictions, similarly, might partially have been to blame for the multiple lines of refrigerators brought out each year."

"But much of the changing of lines has been the moving of a television chassis into a modified style of cabinet or changing the chromium strip arrangement on a box to adjust to competition's prices."

### CAN COPE WITH MATERIALS SHORTAGES

"Today we have learned to live with materials restrictions and supplies are more practicable than they were last year. Also I honestly believe that most manufacturers have become more interested in making profits on the merchandise they produce and in having distributors and dealers run profitable operations than they are in grabbing increasingly large segments of the market regardless of its absorptive capacity."

"Therefore, with more careful planning by producers and with timing that fits the individual company's schedule, I believe that the manufacturers, and certainly the distributors and dealers, could show a healthier 'P and L' statement at the close of their fiscal year if the one line a year policy were adopted."

"Should pricing adjustments prove necessary, they could be made in a fair way on the models in the basic line or additional models could be added. Similarly, new models could freshen the line at mid-year if that proved desirable."

### FROM MANUFACTURER'S SIDE

"From the manufacturer's standpoint, this would mean:

"Longer, uninterrupted production runs with the greater savings that come from mass production."

"Longer planning and testing time for new models."

"Less difficulty in holding members of the manufacturer's distribution team since their purchases would be larger and over a longer time period."

"An opportunity to map out longer-range, more costly advertising and sales promotion programs since there would be more time to amortize them."

"More time to adjust the production runs between the models to fit their proportionate sales, making it easier to hold production in balance."

"In television, which would be introduced probably between mid and late summer, production could continue right through the pre-Christmas rush and not have to be stopped in mid-November when it should be at peak to get set for new merchandise. Dealers would not have to cut their pre-Christmas buying so fine since they wouldn't have to have their inventories cleaned out in the Christmas markets."

"In refrigerators, the major appliance that has been most subject to multiple lines, production runs are now much shorter than they were before and mass-production savings are particularly needed for competitive pricing."

"If the line is introduced in January, the dealer would have plenty of time for planning and selling out his old inventories so that they're not competing with new merchandise for sales when the spring and summer refrigerator selling season arrives."

### FROM DEALER'S STANDPOINT

"From the dealer's standpoint, the effect would be largely psychological. He would be freed of the feeling of being a daring gambler or of having to play it safe when he made his purchases of this standard, foundation merchandise."

"Instead, he could make a careful study of his market and the merchandise offered and buy his basic lines accordingly, knowing that his plans would not suffer major disruptions in three to six months. His buying, merchandising and promotional programs could be built with greater

care and for greater worth to his distributor and manufacturers."

### ADDITIONAL BENEFITS

Farr also made these other points: The television industry at all levels has a patriotic duty to use its medium to get the public to vote. TV receivers should be loaned to civic and social agencies during the political conventions and campaigns to show these events to those who don't own sets.

Receiver manufacturers who have adopted "inboard pricing" are to be commended.

Appliance sales have picked up sharply in recent weeks and the industry is approaching normalcy. On this subject, Farr asserted:

"The retailer today has exceptional opportunities to build greater security on a healthier footing than has been his experience in recent years. There were over-production, under-selling, growing competition, and declining markets bracketing the dealers so very recently that some of us haven't noticed the rift in the clouds. It's there."

"Production has been cut back to a closer approximation of market potentials by most manufacturers. Dealers and their salesmen are getting their selling muscles back after the many years of 'wrap-up' sales were followed by a year and a half of fighting for business."

### GETTING BACK TO NORMAL

"The under-financed, under-skilled newcomers to the industry who were driven to price reductions in a desperate, last-throws effort for survival are either gone today, going, or seasoned and educated in the economic requirements of appliance and television retailing."

"Dealer inventories are almost all back in line and balance again. Refrigerator sales, for which there were such dark predictions, have held up surprisingly well nationally during the past 30 days."

"Let's not fear a return to normalcy. It's normal to have a greater production capacity than sales capacity. It's normal to have a buyer's market at every level. These conditions are important to the fundamental health of our industry because of the competitive effort they bring forth."

In the new television markets, Farr suggested dealers can "avoid the mistakes made in the older markets by treating television separately from their appliance operations and not permitting it to drain away the lifeblood of present livelihoods by absorbing capital, personnel, space, and attention that rightfully belong to appliances."

"Instead they should give television intensive, individual treatment as a separate portion of their business operations deserving plenty of its own money, men and selling area, and particularly its own service."

Farr also advised dealers to drop lines where distributors indulge in excessive backdoor selling.

# refrigeration tubing buy on every count

You buy unmatched tubing features, dependable performance, plus cost-paring engineering skills when you specify Bundyweld Tubing

You get more for your tubing dollar when you specify Bundyweld for evaporators, condensers, vital refrigerant lines.

You buy unequalled tubing features. Bundyweld is the only tubing double-walled from a single strip, copper-brazed through 360° of wall contact. It has high bursting strength, high thermal conductivity. It's leakproof, lightweight, yet stronger.

You buy tubing performance that has made Bundyweld a byword for dependability, proved by the millions of refrigeration units made with

tubing parts of Bundyweld since 1930.

More, you buy the industry's finest skills and services. Bundy engineers help you work out the easiest, most economical way to produce new tubing parts; often save money by showing you how to use less tubing, how to make production short cuts. If you wish, Bundy will take over complete fabrication of your tubing parts, produce them as specified, deliver them on time.

Whether you prize dependable performance or cost-cutting engineering skills, specify Bundyweld . . . and you'll buy both.

Contact a Bundyweld Distributor (listed lower left), or write Bundy Tubing Company, Detroit 14, Michigan

## Bundyweld Tubing

DOUBLE-WALLED FROM A SINGLE STRIP



### 2. FABRICATION SAVINGS

Bundy helps you whip fabrication costs. Refrigerator condenser coil shown above has 16 bends plus an auxiliary bend (arrow). Bundy's patented multiple-bending machines make speedy production of the 16 bends a certainty. The problem: how to produce the auxiliary bend at the same high speed. Bundy engineers went to work, created a special fixture to produce the auxiliary bend on a group of parts simultaneously. The result: total fabricating time reduced, costs lowered.

### 3. PRODUCTION SAVINGS

Bundy engineers are always on the alert to trim production costs to an absolute minimum. The 5/8" suction tube shown above is an example. Despite the two close bends and the upset involved, Bundy engineers devised a way to produce the part complete in one press operation. The result was lowered cost-per-unit, impressive savings for the customer on a high-volume order. These priceless engineering skills go to work for you when you specify Bundyweld.

## BEVCO



QUALITY COOLERS YOU CAN FIT INTO YOUR LINE AND SELL AT A PROFIT

### ACCESSORIES



You sell quality, trouble free cooling in these electric units that operate wet or dry, in 3 sizes . . . 4, 5, 6 ft. Unobstructed interiors. Baked Enamel finish for beauty and sanitation.

SEND FOR CATALOG N-1

The BEVCO Company, Inc.

3314 26 S. BROADWAY - ST. LOUIS 18, MO.



## INSIDE DOPE

by GEORGE F. TAUBENECK

(Continued from Page 1, Column 1)

Drayer-Hanson, Inc.  
Los Angeles, Calif.

Dear Mr. Taubeneck:

I picked up a trade journal a few days ago and fingered through it without paying much attention to the name. Subconsciously, I sensed that it was the AIR CONDITIONING & REFRIGERATION NEWS.

Noting that the opening column on the front page dealt with the late and illustrious Lou Gehrig, I began reading with increasing interest as I got into the story. The yarn was interesting and extremely well told. I read further; then mumbling to myself, said, "this fellow knows what he's talking about and how to tell it. He has either reported or played baseball. Maybe I'm reading the St. Louis Sporting instead of the AIR CONDITIONING & REFRIGERATION NEWS."

So I re-examined the masthead, but my first impression was correct. It was the AC&RN, date of Aug. 11. I checked the by-line and read "George F. Taubeneck." Then I completed reading the whole entertaining column with a greater degree of absorption than I have shown for any sports column in a long time.

By way of a self-introduction, let me say that as advertising manager of Drayer-Hanson, Inc., I have al-

ready placed some fractional space with your publication and sent in a couple of publicity items. One had to do with the recent appointment of Ross Rathbun as our new sales manager. The other called attention to our new Spotaire Series HRC room unit air conditioner. My three syllable name, "Nofsiger" is about as hard for people to say as yours so they call me Jack for short. Ross has spoken of you quite often, but never in connection with sports.

I chuckled at your reference to "Shorty" Cantillon in your anecdote. As a youngster, I played a lot of bush and three or four years of minor league baseball, but went on the voluntary retired list to become a staff artist with what today is called the Los Angeles Herald-Express. When I began my newspaper hitch, it was just the Herald. Later, and before I left, it became the Herald-Express. Willard Mullin, now with the New York Telegram, worked next to me in the art department for nine or 10 years. We were good buddies. I drew pictures and wrote some sports, but after 11 years or so, drifted into the advertising game.

Now let's return to Cantillon. In 1919 (those were great days) I reported to Houston in the Texas League for spring training. It was my first year out. Al Bridwell, former Giant infielder who hit safely when "Merkle should have touched second" fame, was our manager. He was a wonderful fellow. We trained against Minneapolis and the Chicago White Sox. Cantillon managed Minneapolis. They called him "Tomato Face" then. It seems to me he was called "Pongo" also. Carl Sawyer was their team captain and funny man. I don't have to tell you that

he had previously teamed with Nick Altrock on the Washington club. He happens to be a resident of Los Angeles now—is still quite active and can be funny when the occasion demands.

I believe the Chicago White Sox of 1919 was one of the truly great all-time teams. Perhaps passing years and the fact that I was pretty young at the time prevents me from being completely objective. However, I believe that the swashbuckling White Sox of those days, headed by the colorful, aggressive grey thatched "Kid" Gleason could and would hold its own with any collection of baseball greata, past or present.

We engaged them in six or seven exhibition contests that spring. Three kids on the Houston club later became prominent in the majors. "Slim" (I believe his first name was Byron) Harris, lengthy pitcher, Glenn Myatt, strong arm catcher, and Curtis Walker, hard hitting outfielder, all were native Texans.

Perhaps you would like to read a "then" young fellow's impression of the 1919 White Sox. Ray Schalk, of course, was the first string catcher, assisted by "Birdie" Lynn. For my money, Schalk ranks along with Roger Bresnahan, Lou Criger, Johnny Kling, Jimmy Archer, Mickey Cochrane, and Bill Dickey. He was a superb stylist in every sense of the word—rather small, but every inch a catcher. He owned a fine throwing arm, got the ball away fast with a quick snap throw. No hop, skip, and jump, no drawing his arm way back preliminary to a throw. The ball left his finger tips on a line—easy to handle—and invariably on the target. He was intelligent, a

master psychologist, and he knew how to work with and work pitchers. With it all, he was a better than average hitter.

"Chick" Gandil choked up on the handle of his bat, hit line drives and was deadly with men on. When "ducks were on the pond," he was at his best. He was a hustler around the initial sack, a good fielder and a fine target to throw at.

Eddie Collins at second was just about the best keystone operator of any time. "Great hit, fine field, and smart head."

"Buck" Weaver perpetually displayed a mouthful of gleaming ivory in an open-face grin while doing a terrific job at third base. And he could hit too—left or right—according to which arm the opposing pitcher used.

Fred McMullen told me that spring . . . "The only reason I am not the regular third sacker is because I am on the same team with the greatest in the game."

"Swede" Reisberg at short had everything required of his position. He was just coming into his own.

Joe Jackson, left field custodian possessed more natural ability than any player I ever saw. He fielded flawlessly, possessed a great throwing arm and instinctively knew where to throw. But it was at the plate that he really excelled. I've seen Hornsby in his prime. No one has a better right to express his opinion on the subject of hitting a baseball. Hornsby hit the ball where it was. He hit into the ball, not across it. Standing in the back corner of the box, he pulled inside pitches to his field and drove outside ones to his opposite field. Balls over the middle were hit to the middle. He hit balls on the break. His timing was perfect. He was great. But he couldn't be any better than Jackson. What records Joe would have established had the fates allowed him another few years!

In one of our exhibition games, I was playing short for Houston. Jackson was at bat. His position at the plate was so relaxed and nonchalant, it was difficult to imagine the power he could unleash. The secret of course was a beautiful follow through which goes with perfect timing. Two were out when Jackson timed a pitch and rifled a skimmer directly at me. The ball smacking my glove sounded almost simultaneously with its crack against the bat. I threw to first, making three out and trotted towards the bench. As "Swede" passed me heading for his position he said, "You raised your head on that one, kid."

"Do you think you would have kept yours down?" I asked.

Enough for Joe Jackson. However, "Hap" Felch, center fielder—big, fast, jaunty, possessor of a tremendous throwing arm—was headed for stardom except for his moment of weakness.

And Liebold in right could hold his own any place.

And now the pitching staff. I can still remember "Lefty" Claud Williams, Eddie Cicotte, and Dick Kerr. Frank Shellenback was a rookie then from my home town as was Fred McMullen, utility man and a great fellow and ball player.

Recently, Ed Durling stated in his column that the White Sox won a game in the 1919 World Series in which every man but the pitcher was fixed, meaning of course, Dickie Kerr. I wrote him stating that he was doing several honorable men a grave injustice, including Liebold, Collins, Schalk, Lynn, and others whose names have never in any way been linked with the scandal.

However, as of this moment, Durling has never seen fit to correct his statement. I also know that Fred McMullen was a victim of circumstances. He's as innocent as I am and I wasn't even there.

This has turned into a full length novel. Hope you have not been bored. Am I right in surmising that you have played baseball professionally? You write as one who has been very close to the game.

J. C. NOFZIGER,  
Advertising Manager

### Out of Our Mailbag

Engineering News-Record  
New York, New York

Dear George:

Going through my files, I just re-read a copy of your circular, "A Little Bit Pregnant."

George, possibly because of the communist investigation and the political situation and rereading this, it seems even more pertinent to me

than when I first received it some-time ago.

It seems possibly that all of us are more receptive to some of the points you brought out.

And it's obvious that the morale of the country is at a low ebb brought about by unethical and dishonest practices. As you point out, it's high time that corrective measures should be taken—and we can start right in our own industry!

B. F. HORN

Servel, Inc.

Evansville, Indiana

Dear George:

Concerning workers' opinions of the Taft-Hartley law, Dr. Claude Robinson, president, Opinion Research Corp., has reported:

"This is our latest Taft-Hartley survey, the third reported in the pages of Look. In both previous cases, the findings revealed, rather surprisingly, that although more U. S. employees were against the Taft-Hartley law than were for it, a majority favored its 10 main provisions."

"Now this third survey indicates two important points on the state of worker thinking. First, the Taft-Hartley name is unpopular with workers, more so today than a year ago. Bad labels pasted on the law have stuck. Employees called the law 'anti-union' or 'pro-management,' though they have difficulty saying what features they object to. Second, workers strongly endorse laws to make unions more responsible. Out of 10 leading Taft-Hartley provisions put to employees, nine win approval of the majority."

"This is the problem that union leaders face. People are convinced that unions are a good thing; public support for a law to support bargaining rights was never higher. But unions have failed to convince even their own members that the regulation of unions is unnecessary."

"These are the public opinion pressures which explain why Congress has been inclined to go slow in repealing the Taft-Hartley law."

"This is how employees answered the questions:

Would you favor a law to require union financial reports?	80%
prohibit Communist union leaders?	79%
delay strikes in public service industries?	76%
allow union shop only with majority vote?	75%
allow companies to sue unions?	73%
require a 60-day cooling-off period?	71%
outlaw closed shop?	68%
allow checkoff only with workers' consent?	56%
allow freedom of speech for employers?	55%
prohibit union political contributions?	40%

LOUIS RUTHENBURG, Chairman.



## FOLLOW THE LEADER!



### THE CLUBSTER

Compact, all-in-one unit holds 2 half barrels on top while one precools under the spacious 3 case bottle compartment. Complete with refrigerated faucets which keep beer at ideal temperature from keg to glass—this beautiful model comes in stainless steel (illustrated) or black baked enamel.

MANY OTHER MODELS ALSO AVAILABLE

WRITE TODAY FOR COMPLETE INFORMATION

## LA CROSSE COOLER CO.

Factory and Gen'l Office: 2801 Lower Blvd. E. La Crosse, Wis. Export Office: 88 Broad St., New York City. Cable Address: Estaport.

# WOLVERINE

## announces a new development in accumulative driers achieved through the Spun End Process

### UNIQUE FEATURES:

- Keeps moisture out of refrigeration system.
- Eliminates separate drier; thereby reducing costs.
- Obviates possibility of plug-up (which is sometimes encountered in fully-packed driers).
- Assures against deterioration of unit by having silica gel suspended in an enclosed mesh bag.



The eleven-inch copper shell forming the accumulative drier shown here was fabricated by Wolverine's fast, economical Spun End Process. Its outside diameter measures 1 1/2" and the wall is .025. The silica gel (P.A. 100) is enclosed in a 100 mesh bag which is suspended between baffles at both ends. The entire unit, you will note, is enclosed in a one-piece shell, which eliminates assembly costs and increases efficiency.

This one example may suggest other ways in which Spun End Process can be utilized to serve your requirements. It may even reveal a new approach to your problem. Make it a point to look into the possibilities this spinning process offers you.

Would you like a copy of our new brochure,

SPUN END PROCESS?

A PATENTED PROCESS REG. U.S. PAT. OFF.

### WOLVERINE TUBE DIVISION

Calumet and Hecla Consolidated Copper Company

INCORPORATED

Manufacturers of tubing exclusively

1413 Central Avenue

Detroit 9, Michigan

Wolverine Tubes and the Wolverine Spun End Process available in Canada through the Unifin Tube Co., London, Ontario

Wolverine Mill Depots:

DETROIT, MICH. • DECATUR, ALA. • HOUSTON, TEXAS • LOS ANGELES, CALIF.  
LONG ISLAND CITY, N. Y. • PHILADELPHIA, PA. • PROVIDENCE, R. I. • ST. LOUIS, MO.

Sales Offices in Principal Cities





## Barnett, Latzko, Taft Named To Head McCray Sales, Service Depts.

KENDALLVILLE, Ind.—Plans of McCray Refrigerator Co., Inc. for an increased sales program have resulted in the appointment of three department heads by J. W. Bostwick, general sales manager. They are Fred L. Barnett, sales manager, national accounts; Edwin J. Latzko,



D. L. Taft



F. L. Barnett

sales promotion manager; and Donald L. Taft, general service manager.

Barnett was formerly McCray western national accounts manager. Delegated responsibility given him includes development of the volume sales to national outlets, manufacturer accounts, and the Federal government.

Latzko has been associated with McCray for five years in various capacities in the sales and engineering divisions. He is responsible for the execution of the increased sales promotional program including the publicity, national exhibiting, and editing a new sales publication.

Taft was formerly service manager of the Universal Cooler Div. of Tecumseh Products Co. Development of the field service training program and the new re-aligned general service policy will be assumed by him.

## Midwest Agency Named By Tenney Engineering

NEWARK, N. J.—Tenney Engineering, Inc. has announced the appointment of Corbin & Platz Sales Agency of Kansas City, Mo., to handle its midwest territory.

The agency will handle Tenney's line of "lowsides"—cooling units, coils, expansion valves, ice makers, and its "Defrostolator."

Both Mr. Corbin and Mr. Platz, principals of the agency, are former Viking sales engineers. Corbin was with Viking more than 30 years, his last post being that of vice president and sales manager. Platz was Viking's sales manager in charge of the central division.

## Future Supermarkets Due for Some Changes

SARANAC LAKE, N. Y.—Those big glass windows that mark today's supermarket may be used less extensively in the "super" of tomorrow to reduce the load on the air conditioning system.

That's one of the changes possibly coming in supermarket planning, according to Ernest Herrmann, district merchandise manager for E. O. Bulman Mfg. Co.

Talking to the New York State Food Merchants Association recently, Herrmann also guessed that shorter aisles will replace the "bowling alley aisle" which speed up shopping too much. He further predicted that merchandise will be arranged in meal-planning shopping sequence and that refinements will be added to help the checker work more rapidly.

The keynote for future store planning, he said, will be "beautiful efficiency for pleasant shopping." There is a need, Herrmann declared, for more warmth and atmosphere in the supermarket.

## Self-Service Meat Shoppers Buy More In Less Time Than Service Customers

WILMINGTON, Del.—Self-service meat shoppers purchase more products in about one half the time it takes a similar number of shoppers to complete their purchases in service meat departments, according to a Du Pont consumer survey.

The survey, "Time Lost or Time Saved," the first of a new series of time studies, has been released by the Du Pont Film Department.

Made during a normal shopping week in stores throughout the country, the study discloses that 2,700 shoppers in self-service meat departments purchased 5,927 items in 116.7 hours, while an equal number of service meat shoppers spent 198 hours making 5,467 purchases.

During the weekend, the survey points out, the rate of meat sales and the time saved by self-service meat shoppers was even greater than on previous days. On Friday and Saturday, a group of 1,500 self-service shoppers bought 9% more meat products (3,861 items vs. 3,542), in 55%

less time (74.9 hours vs. 136.3) than a comparable group of service shoppers.

The survey also noted the absence of the weekend traffic bottleneck in stores where pre-packaged meats were ready for "impulse" shoppers.

Emphasizing the important part "impulse" buying plays in building meat sales, the survey said a recent Du Pont study, "On With the New," reported that fresh meats in service departments have an impulse rating of 14.8%; luncheon and smoked meats, 33.6%. But in fully pre-packaged meat departments the impulse rate was 19.9% and 48%, respectively.

Food stores in Atlanta, Boston, Chicago, and Washington, D. C. participated in the survey. For each self-service meat department under observation, Du Pont researchers selected a service meat department of comparable size. Shoppers, picked at random, were timed upon entering or leaving meat departments.

## Put Another Nickel In

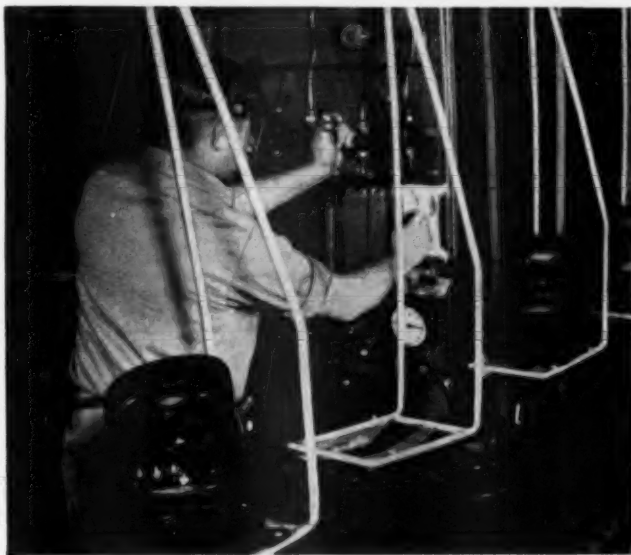
### Apartment May Be Prospects For 'Super' Vending Machines

CHICAGO — The possibility of "super" vending machines being installed in large apartment buildings to dispense milk, bakery goods, and other food items was seen at the recent convention of the National Automatic Merchandising Association.

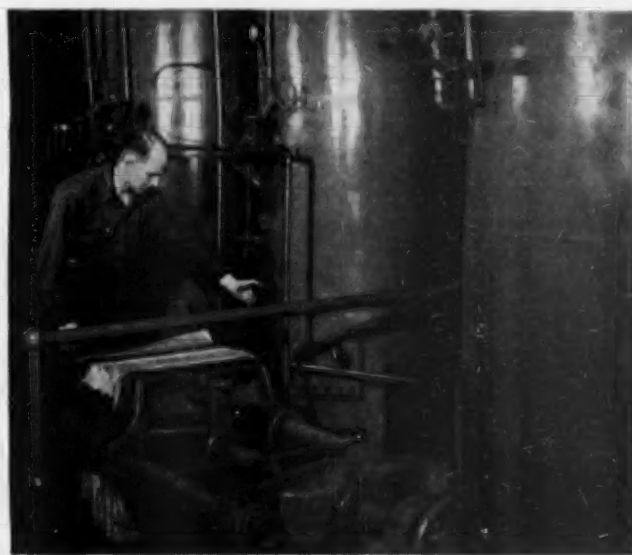
At a press conference held by the association, it was reported that a large apartment building project in New York has milk vending machines for home use. Others are said to have had soft drink and cigarette dispensers for some time.

## New Appliance Store in Plains

PLAINS, Pa.—Kaufer Bros., a new appliance store, has been opened at the corner of North Main and Carey Sts. The store conducted a formal opening promotion during which cooking demonstrations were featured.



OVER 200 MAJOR MANUFACTURERS of refrigeration and air-conditioning equipment use Tecumseh Compressors. All Tecumseh units are lubricated with Suniso—more than 10 million since 1935. The 2 cylinder compressors shown here are being charged with Freon 12 and Suniso.



THE PURITY OF SUNISO is protected from storage tank to charging board. Here, just prior to charging, the oil is treated to eliminate any gases or moisture possibly picked up in storage. This operation is typical of precautions taken to assure the top protection Suniso can provide.

## ALL TECUMSEH UNITS—OVER 10 MILLION OF THEM—HAVE BEEN SUNISO CHARGED

Tecumseh Products Company, of Michigan, is the world's largest manufacturer of refrigeration compressors. The reputation its products enjoy for long, troublefree service is unexcelled. One reason is that all bearings are superfinished by diamond boring, Bearing-izing and Micromatic honing. Limits of a few ten-thousandths of an inch are held on all bearing parts. Another reason: ever since its formation in 1935, Tecumseh has charged its compressors with Suniso Refrigeration Oil exclusively.

Today well over 10 million Suniso-charged Tecumseh Compressors are in service. They range in size from a 1/9 hp hermetic to a 15 hp conventional. Current production is geared to approximately 2 1/4 million hermetic units a year. Their entire production of both types of compressors will be protected by Suniso.

Most equipment manufacturers throughout the industry specify and use Suniso. Use this "Job Proved" product yourself, and reduce your service calls.



AS LITTLE AS ONE DROP OF WATER can freeze and clog up a refrigeration system. To make sure they are as free of moisture as the oil, the compressors are kept in drying ovens at 270 to 290 F for at least 8 hours before charging.

### DEPARTMENT AC-10

SUN OIL COMPANY, Philadelphia 3, Pa.

Please send the booklet "Lubrication of Refrigeration and Air-Conditioning Equipment."

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

TECHNICAL ASSISTANCE AVAILABLE. Sun's engineers are at your service for consultation on lubrication matters. It will pay you to utilize the experience they have gained in solving a wide variety of problems in many different industries.

## SUNISO REFRIGERATION OILS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO & MONTREAL



## CLEANABLE WATER-COOLED CONDENSERS

More Efficient Double-Tube  
Counter-Flow Design

1/2 to  
25-Ton  
Capacity



Acceptance in the field is rapidly changing to "Demand" for these efficient, more economical Cleanable water-cooled Condensers. Owners and service men prefer the "new unit" efficiency that can always be maintained by a simple cleaning process. Brass headers, machined and brazed.

Write for Catalog and Prices

WHOLESALE IN PRINCIPAL CITIES

Halstead & Mitchell  
BESSEMER BLDG. PITTSBURGH 22, PA.

## How Manufacturers Can Help To Sell

1. Build Good Consumer Item
2. Pick and Train Distributors, Representatives Carefully
3. Set Up Workable Selling Policies

CHICAGO—Generally speaking, appliance manufacturers and distributors could do a lot better job of helping dealers promote, sell, and service their merchandise, in the opinion of Harold Sampson of Sampson Enterprises, Milwaukee.

Addressing the mid-year meeting of the National Appliance & Radio-TV Dealers Association, Sampson listed four things the manufacturer should do:

1. Build an item that fits a consumer's problems.
2. Be more exacting in picking distributors or factory representatives.
3. Equip himself or his distributor on the proper promotions for the retailer, to enable the retailer to sell his product.
4. Have the personnel available who can help train the dealer and the salesman; help set up the services and selling policies that will help, rather than hinder, the retailer; and keep his line as short and salable as possible.

In weighing manufacturers—and also distributors—on these points, Sampson indicated he thinks there is plenty of room for improvement. Take, for instance, sales meetings on new lines.

"They wine and dine you," Sampson said. "They have a complete line of refrigerators and a line of washers lined up."

"First the distributor gets up and tells you, 'We are glad to have you

here. Enjoy yourself.' Next they have some factory representative who gets up: 'We have the hottest line in the country, terrific!'

"After that the advertising manager gets up: 'This is the big billboard for advertising this, and here is this magazine and that magazine. It is really terrific; we have the hottest campaign in the country.'

"He gets up to a certain point and then: 'Only—only we have a certain amount of money to spend locally. You buy so much and we will give you so much advertising.'

"The meeting is finished... and you walk out of the place and start to think: 'What the hell did he say?'

"He didn't show me how to sell it. He opened the door of that refrigerator, turned on that television set, and started that washer. It was the same story as last year; nothing new."

"He didn't tell my salesman anything. They sat through the evening. Some got high; some listened to it and some didn't—most of them didn't, I should say. But he didn't say anything that you can take home with you and use the next day on the selling floor."

In calling on manufacturers to be more exacting in picking distributors and representatives, Sampson had this to say:

"We have some dillies calling on us. It is really pathetic. You wouldn't have them on the floor at \$35 a

week... but still they come in, take up your time... and all they want is an order."

Sampson asked: "How many salesmen come into your office in the morning and say, 'Come on, let's have a cup of coffee and a doughnut,' or come in at noon and want to take you out to lunch or for a drink or want to take your salesman off the floor? I don't know whether they are coached that way, but they still continue to do it."

He stressed: "Don't let them waste any of your time... because your time is money. You have only so many hours in the day... Every single point a distributor or factory man can instill in your men is money to you. It is very, very important."

### Lack of Training

Manufacturers, he declared, "should take just as much care and time in training as you and I put into salesmen... They bring (men) in from the factory or the district office, show them the catalog, give them the story, the pitch—'We are this and that. Go out and sell it.'"

"You start asking a few questions, you want this and that, and they say, 'Just a minute. I will have to contact the home office.' If they came in and really spent some time and knew what they were talking about, it would be a terrific asset."

Sampson then considered his re-

## HOUSEHOLD REFRIGERATION

lated point—that manufacturers should equip themselves or their distributors for aggressive promotion through retailers. He referred to the automobile manufacturers who sponsor two to six-week schools for dealers, adding that the latter "are not newcomers. Some of them have been in the business 15 to 20 years."

### Profit from Automotive Techniques

Still, Sampson pointed out, manufacturers bring the dealers to Detroit, bring them up-to-date on every type of problem—servicing, merchandising, advertising, sales promotion, sales training—and give them diplomas.

"They don't have a dinner down at some hotel," he asserted. "They spend a lot of time, and they give these men homework while they are in Detroit. All of us would be willing to invest our time in something like that."

He also called attention to the two-day sewing machine school conducted by Westinghouse in Rockford.

"Everyone of our men went through the school and today can sit down at a sewing machine and make little hats, purses, small aprons. When a man sews, it is a hell of a lot more impressive than when another woman does. Why can't some of the other manufacturers do the same thing?"

Sampson further noted that after his firm took on the Hotpoint line, "everyone of our salesmen went through the factory. They saw the operation from a small piece of steel to a finished product. They saw them make the side of a stove, the top of a stove. They saw the Caloric operation. At least they know what they are talking about."

### Value of Product Information

He continued: "The manufacturers should know that a retailer has to romance a product in order to sell it. You can't just say, 'Here it is; sign the order.' The easiest product to sell is one that you have a complete story on, a complete, logical step-up..."

"We have a washing machine line that starts at \$99 and \$109 and ends up at \$139 or \$159. Some (manufacturers) have the same thing in the refrigerator line."

"In the television line you have a \$199 17-in. table model. (The manufacturer) changes the color, \$219; wood at \$239, and the console at \$299. It is still the same chassis. Are you going to sell a brown against a black for \$20 more?"

Sampson said every retail salesman should know the nut-and-bolt story.

"With the electric range, you can jump around on it and show the customer how strong it is. It is a good story. How many factory 'reps' or distributor salesmen have come into

the store and performed that feat lately? It is very simple.

"How many have come in and helped you trim a window, brought in some displays, and helped you with some ideas? How many have checked your literature, your advertising material that goes with the products?"

"How many carried a half-dozen pamphlets on the washers or refrigerators and left them there? Sure, if you want to you can buy a thousand for \$2.50 or \$5. But if they would invest, out of their own pocket, \$2.50, and left you a half-dozen, the next time they come back there might be an order waiting for them."

### Advertising Timing

Sampson also had some complaints about advertising. For one thing, he said, his firm has found that ads on giveaways break before the store receives the gifts.

"You work like hell to build goodwill, you beat your brains out, and the customer comes in and asks for the premium and we don't have it in yet—come back later. How many of them come back?... It is antagonistic, and there is no reason for it."

"We have a policy now that we won't permit our name to be listed in any free gift ad unless we have the different items in our hands at least a week before the ad runs, because after that you can't withdraw your name."

"A lot of you do advertising in your local papers. I have one pet peeve on the refrigerators; they show a picture of it standing empty. It doesn't mean a damn thing. They don't show it that way on television or in magazines."

Another complaint was that newspaper mats are not "geared for the retail level." There are very few, Sampson claimed, that "you can use and just put your name on."

"Up here it is Joe Blow's refrigerator and down below you get a little piece of two or three inches... It is not made for you... It is not geared to bring the people into the store."

"How many have mentioned trade-ins, unless they have a special promotion? And you have to sit down and rework the ad, and by the time you have finished, it looks like hell because it is tough to cut up a mat."

### What's Happened to Contests?

Many promotions, too, are not designed for the local level, Sampson said. And he would like to see more contests set up—"they used to do it in the old days"—with the dealer getting help on planning."

Sampson had gripes, too, about servicing and parts delivery.

"How many of you have opened up a brand new refrigerator in a new box and have plugged it in and it didn't work?" he asked. "You tell them about it (and are told)—'I am

(Concluded on next page)



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**PENN**  
AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES



SEE PAGE 15



## Manufacturers Can Help--

(Concluded from preceding page)  
sorry. It was delivered to you in a crate. It was running when it left the factory."

He said his firm had to rework every single television set of one model in a top line last year. Yet, he said, the manufacturer "did absolutely nothing to assist us or the distributors in making the conversions."

### Dealer Gets the Blame

When there is an extended delay in getting parts, Sampson stated, customers "never get antagonistic against the manufacturer or distributor. They will buy that product again. It is your fault; you didn't get it. Still, you spend all your good time, all your energy to sell the customer and make that sale and you lose it because of a 25-cent knob or a special light they can't get anywhere else. . . .

"The factory doesn't seem to realize—or if they do realize it they don't seem to care about—some of the things that are going on. For example, there is one manufacturer from whom it is impossible to buy a part for his used refrigerator. We have rebuilt all our used refrigerators, but he doesn't sell parts to any retailer.

"If there is something wrong with the unit, you take it back to the distributor and pay him \$39.50 and they will overhaul it. How much can you get for a used box?

"The particular part I have in mind costs \$1.50, and an hour's labor to put it in. We wrote the president of the company explaining the problem.

"We have been a franchised dealer for 15 or 18 years and we were getting a lot of their products in trade-ins. We never even got the courtesy of an answer."

### Trade-In Program

Another thing Sampson would like to see manufacturers and distributors do is present "a real program" on exactly how to handle trade-ins.

"I know of only one manufacturer who has a complete program for that," he said, "and they even furnish cards—that is Frigidaire. They will give you a complete portfolio, showing you cost accounting and everything that goes with it."

Further, dealers need seasonal promotions, Sampson said. He pointed out that as the result of a seasonal promotion on a new "Speed Queen" washer, the manufacturer was recently 60 to 90 days behind on delivery on its whole line.

In general, though, Sampson stated, dealers are not getting the seasonal promotions they did in past years. Instead, he observed, the distributor or factory representative comes in and says: "So-and-so did a terrific job in Seattle."

But dealers "all have local problems," the speaker emphasized. "We all have different problems."

Sampson went on to remark that many suppliers come to his firm from time to time asking how to

move certain models. The trouble is, Sampson said, that they come too late; they come after the merchandise has been purchased.

"If they would come to you and ask you, 'How many should I buy of this or that model?' they would be a lot better off," he commented.

He noted here that NARDA has a good opportunity to set up a dealer committee to give distributors the benefit of retailer thinking—if they want it—"so they won't come to (dealers) afterwards and say, 'How can we move this? And how can we move that?'"

### He Took on a Side Line

Sampson said that some months ago his company took on a line of typewriters simply because the salesman had made a complete study of how Samson stores are operated and thus "knew what he was talking about; he knew how to sell his product."

He told the dealers that "if you have traffic coming into your store, making payments, and you put (typewriters) near your payment counter, they sell. They are fair traders; they don't run 25 to 50% off." And, he added, the manufacturers "don't come out with new models every 60 or 90 days. We sold 130 units in six months."

### There Must Be a Need To Sell

Sampson charged that some appliances are put on the market without finding out what the need is for them or how the dealer is going to sell them. He alleged that top engineers for manufacturers say, "We will give the public what we think is best for them."

Asserted Sampson: "It is not what they need or what they want. That may sound silly. . . . Analyze some of the things, though, that we handle on the floor, some of the things you are taking mark-downs on.

"These mark-downs," he said, "in addition to your seasonal mark-downs, are tremendous. Start figuring out your profits on what you have invested, and your turnover is very, very low.

### Get the Manufacturer To the Retail Level

"If the manufacturers really surveyed . . . really came down to the retail level, instead of hiring agencies, as they do, and if they would find out what the retailer needs, what we can sell, how we can merchandise it, I think we would be a lot better off. . . .

"It is about time that these manufacturers started talking over the problems with you and the rest of us. We are the ones who have to move the merchandise for them."

Pointing out that one of the signs around his office reads, "The customer's goodwill is the key to our success in the future," Sampson concluded: "That is true with everybody. If you are in business just for what you can make today, get the hell out of it."

## KITCHEN PLANNING SERVICE

### Stimulates Appliance Sales

PLAINFIELD, N. J.—The offer of an intensified kitchen planning service is a strong sales persuader. It is an extra ingredient which impresses a prospective purchaser of refrigerators and home freezers with not only the use that can be made of the merchandise, but the extra comfort and convenience a housewife can enjoy by scientific arrangement of working and storage space.

Fred A. Hummel, Inc., appliance sales concern, has made a strong play for this type of business in recent months with gratifying results. Their policy is not only to demonstrate merchandise, but to offer a complete packaged kitchen planning service which solves each individual problem. Even the painting, wiring, and flooring can be handled under one contract, with these services farmed out to contractors.

Under such a program the first step is to make an appointment at the home to take measurements. At that time the housewife is assured that she is under no obligation to buy or enter into any type of agreement. The expert on kitchen planning, Joseph T. Price, who is an engineer, usually makes the call. Then he consults the owner on preferences and problems such as lighting, removal of partitions, or whatever else may be involved.

At the office details are worked out by Richard C. Squire, a compe-

tent draftsman. He shapes out a rough sketch in pencil to scale. Then it is presented to the housewife at her home with an estimate of how much the job will cost. If convenient, the prospect is urged to visit the company's modern salesroom to look over a wide and varied selection of appliances and fixtures.

Although the majority of this work is in existing dwellings, some of which are from 15 to 25 years old, this type of service has been extended to new building construction as well. Architects and builders often bring in their plans and blueprints to the store, usually for consultation on setting up standard-sized fixtures so that there will be no difficulty in making installations to conform to manufacturers' specifications on appliances.

Various means of promotion are used to bring this service to the attention of the public. The best, of course, is through recommendation from satisfied users or word-of-mouth suggestions by store personnel to persons coming into the showroom. Often many of these visitors are known personally to the clerks who bring up the suggestion of kitchen modernization.

New occupants of existing houses are also likely prospects for this



RICHARD C. SQUIRE, draftsman for Fred A. Hummel, Inc., Plainfield, N. J., working on custom-made kitchen plans in office in rear of showroom and in clear view of potential customers.

type of business. Leads are obtained either through watching newspaper columns on real estate transfers, or maintaining close relationships with realtors and other business people who may know of such transactions.

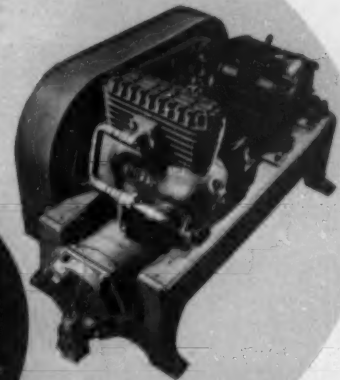
Outside promotion is largely through newspaper space in the local daily, *Plainfield Courier-News* and surrounding weeklies.

### Bendix Names Silver Corp. Buffalo Area Distributor

BUFFALO—M. E. Silver Corp. here has been appointed distributor for Bendix Home Appliances in the Buffalo territory, according to Parker H. Erickson, director of sales for Bendix.

M. E. Silver is president of the Buffalo concern. The general sales manager is Arthur Juhre, Bendix sales manager is Mel Campbell, and service manager is Earl Merchant.

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## Credit as a Sales Tool

Banker Tells How To Establish and Carry Out a Sound, Flexible Financing Policy That Will Help Stimulate Sales

By Kenneth R. Wells, Vice President,  
American National Bank and Trust Company of Chicago

Every businessman is in business to make a profit. What he wants to do is to develop his sales program to produce the greatest volume of sales with the least expense and the greatest profit.

Financing these sales is essential in your business, but financing involves credit extension, and credit, if properly used, is a sales tool. However, no businessman ever sold on credit when he could sell for cash. If you could always get paid in cash when you delivered merchandise and you could sell all of the merchandise you could secure on that basis, you would never have an open account or an instalment credit transaction.

Therefore, as I say, credit is a sales tool and is a method of stimulating sales. Like any stimulant, over-use can sometimes be disastrous.

I am not going to talk very much about your open or 30-day charge account business, as that ordinarily does not present much of a problem. I would like to talk for a few moments about your instalment selling, including your terms, your credit problem, documentation and rental plans, as I believe every one of you sells some equipment on the instalment plan.

Right after the war when equipment was still scarce, the financing problem was not too great. Today,

with equipment plentiful, competition is more severe and selling terms become more important. The longer the terms the greater the risk. It is important to every distributor and every dealer in the commercial refrigeration business that equipment which is sold on the instalment plan be sold on a sound basis. The profit in any instalment transaction is represented by the last two or three payments.

If retailers with too little capital are permitted to buy equipment on terms which are unsound, it is harmful to everyone connected with your industry and harmful to the retailing business in general. Our business failures, in many cases, come about from the fact that the man starting the business did not have enough capital to operate his business.

It is easy for me to stand up here and say "sell on sound terms." It is not so easy to establish a yardstick for those terms. First of all, let us define what we mean by sound terms. There are two approaches to this question.

The conservative definition of sound terms on any instalment obligation states that at all times during the life of the obligation the unpaid balance should be less than the repossession and resale value of the equipment being financed. I think we

will all agree that much of our instalment business does not meet this definition.

There is another definition which is more liberal. We might call it the merchandising definition. It states that instalment terms are sound when they create the greatest volume of sales without unduly jeopardizing the ultimate profit. The difficulty with this definition is that we extend credit under the belief that the terms are sound, and cyclical changes in the business economy prove that we were wrong.

I think a happy medium between the two definitions is the policy followed by most successful organizations.

Let us talk about down payments and terms for just a moment. I have seen deals rejected on 24 months with the statement that the deal would be approved if written for 12 months. To me, such a decision is the result, in most cases, of unsound thinking.

If a prospective purchaser can pay only \$50 a month for a piece of equipment and the equipment seller has a limit of 24 months, the unpaid balance, including financing charges, cannot exceed \$1,200. If the piece of equipment that the man is buying sells for \$1,800, you had better get \$600 down. If you increase the

● "Credit is a sales tool and is a method of stimulating sales. Like any stimulant, over-use can sometimes be disastrous."

● "99% of the people are honest, not because they are morally honest but because they have found in our way of living that it pays to be honest."

● "The easiest time to get credit information is during the making of a sale and not after the deal has been closed."

● "Changes occur from time to time in the state laws, and you should have your forms checked periodically."

The above salient points are from a talk given by Kenneth R. Wells, vice president of the American National Bank and Trust Co. of Chicago, at the sixth annual convention of the National Commercial Refrigeration Sales Association held in Chicago. Wells' discussion of financing commercial sales is presented here in full.

monthly payments, all you do is have a delinquent account.

### Reject Deal If Customer's Payments Will Be Too High

The capacity to make a monthly payment cannot be increased by a credit manager's decision. If \$50 is the limit of the buyer's ability to pay, you should reject the deal unless you can get sufficient down payment to reach a figure which can be paid by him in the time limit which you have set on the transaction. There are many deals which are perfectly good credit-wise if we were not limited by a maximum term which we establish.

Our customer might be able to buy on nothing down and pay \$50 a month for 36 months, and could conceivably be a reasonably good credit risk for that amount. True, the down payment greatly increases the chance for the deal to be paid out according to terms, but if we increase the monthly payment to \$75 in our example, we are undoubtedly going to have a collection problem.

As I mentioned earlier, the profit in an instalment transaction is represented by the last two or three payments. The longer the terms the greater the risk, because your customer is subject to business fluctuations and hazards with respect to his personal and family life. Many of these factors are beyond his own control.

### Salesmen Usually Urge More Liberal Terms

Whatever terms you have established for your own business will never quite satisfy your selling organization. Most salesmen want a little more than you are willing to give. From time to time one of your men will come in and report that a competitor down the street is willing to sell on a lesser down payment than you require and give terms for a longer period of time on the balance. He bluntly informs you that if you do not meet the terms of a particular deal you are going to lose a sale.

It is a very peculiar fact, but I have never found a man who will admit that he is "the fellow down the street" who started stretching the terms. It has been my experience that your weakest salesman will run into this problem most frequently. Your best salesmen will find very few cases where a competitor is doing things which you have said are unsound.

The whole question boils down to this. How far can we extend instalment terms before we jeopardize our profit? Perhaps we can get the answer to this question if we discuss some credit fundamentals. As I said before, credit in itself is a sales tool; we would prefer to sell for cash. The very definition of credit from the standpoint of the debtor usually reads that "credit is the power to obtain goods or services immediately in exchange for a promise to pay in the future." On the other hand, from the viewpoint of the creditor the definition states that "credit is the right to receive a future payment."

Ordinarily, the debtor does not ask for credit. Instead, he offers his credit to you as the creditor and you

have the right to accept or reject this offer of credit. If credit is too freely extended it may do harm to all business, and yet if too restricted it may curtail the volume of trade and harm all business. Our credit problem, therefore, is to develop a procedure which will permit the maximum number of sales to good customers and screen out the undesirable customers. How do we do this?

We must have a satisfactory credit system and a credit man in our own organization.

Incidentally, a credit man was recently described as "one who is past middle life—square, wrinkled, intelligent, cold, passive, non-committal, with eyes like a cod-fish, polite in contact but at the same time unresponsive, cool, calm, and as composed as a plaster-of-Paris cat; a human petrification with a heart of feldspar, without charm or the friendly germ, and minus a sense of humor. Fortunately, they never reproduce and all of them finally go to hell."

### Sales Department Shouldn't Dominate Credit Office

The credit department should not be dominated by the sales department. You have all heard the expression that 99% of the people are honest. I would like to qualify that statement. I believe that 99% of the people are honest, not because they are morally honest but because they have found in our way of living that it pays to be honest.

If you went out tonight with 100 black bags, each containing \$500 in small bills, and dropped bags all over the streets and alleys of Chicago, and then ran an ad in the paper tomorrow stating that you had lost a black bag containing \$500, you would get back many of the 100 bags. You would not get back 99 of them, however.

### Before Sale Is Best Time To Get Credit Data

When we extend credit we must weed out the undesirable customers, and we can do this only if we have some credit information on which to pass credit. Many of your salesmen are hesitant about talking to a prospective customer relative to his financial condition.

The easiest time to get credit information is during the making of a sale and not after the deal has been closed. The obtaining of credit information need not be a burden on your salesman. Your salesman should be able to obtain much of the credit information without his customer realizing that he is obtaining credit information, as such.

It is only natural for a salesman in talking with his prospect to find out what equipment he has and from whom he purchased it. During this conversation it usually develops whether or not the equipment is free and clear. This information automatically gives the salesman a list of the sellers of the equipment and a knowledge of the present equipment obligations. These are excellent references and yet the salesman has never asked his prospect for credit information.

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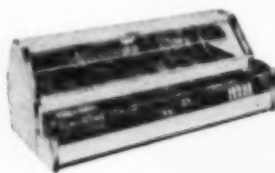
GP-6 for frozen food, self-defrosting, with the See-Sell front



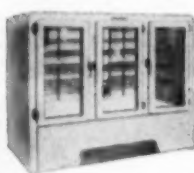
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## Credit as a Sales Tool--

(Concluded from preceding page)

Your office should keep a record of the bank on which the customer draws his down payment check. This gives you one more credit reference. If your prospect is a grocery store, the salesman can tell the lines of merchandise carried by the trade names of the canned goods on the shelves, and he can usually secure in general conversation the names of the dairy company and wholesale baker.

We now have a record of his equipment obligations, the name of his bank, some trade references and his principal suppliers of merchandise. What we would also like to have is some idea of his volume of business and his net worth.

### Low Guess of Store's Volume Will Bring True Figure

It has been my experience that every owner of a business is very proud of that business, whether it be large or small. If your salesman has had any selling experience at all, he can very quickly estimate the average volume that the store does. Cut this figure in half and then ask the store owner if his volume is approximately so many dollars. The owner's pride will generally force him to come out with the true sales figure. Then the salesman can compliment him on his volume of business.

Your salesman can then ask how long he has been in business, and if he owns the business himself or if he has partners. These are natural follow-up questions. Up to this point the salesman has not pulled out of his briefcase a long, legal-looking form entitled "Credit Application." I think you will agree that if a credit manager was presented with the list of information we have developed so far that he could very quickly verify this information and make a prompt decision with respect to the extension of the credit.

I realize that many of you and your salesmen have been doing this for years. However, I regularly run across situations where salesmen are reluctant to discuss credit information with prospects and do not realize that they can get the facts they need without appearing to do so.

### Seller Retains Title In Contract Sales

Assuming that the transaction has been approved and the sale is to be made on a time payment basis, then you must have proper documentation. Under a contract of conditional sale, title to the equipment is retained by the seller, or his assignee, until such time as the purchaser has paid the contract in full. Title to the equipment must be vested in the seller at the time the contract is entered into or the contract will not stand up.

I know that some of you, from time to time, invoice a customer on your regular terms and then later the customer will tell you that he wants to put the particular piece of equipment on a contract. You have the documents prepared, signed, and recorded in the ordinary way. Legally such a contract is not valid. When you invoice the customer on your regular terms you pass title to the customer.

Such a contract would not stand up in court against a trustee in bankruptcy who claims the equipment is part of the general assets of the contractor. The effect would be that you would become a common creditor instead of a secured creditor.

Once you have passed title you cannot use a conditional sale con-

tract, but you must take a chattel mortgage. You must recognize that such a mortgage is subject to any prior liens which the purchaser may have placed on the equipment between the date of your sale and the date of your mortgage.

Many of you have title retention clauses in your purchase order forms, so that when your salesman takes an order it is agreed that you have title to the equipment until it is paid for. Your billing department should be instructed that on all invoices which are to be subject to conditional sale a statement to that effect should be typed on the invoice.

### Suggest Attorney's Survey Of Contract Forms

I recognize that some of you are from states where a chattel mortgage form is to be preferred, but I wanted to point out this question which may come up in connection with conditional sale contracts. I have seen it happen that a seller has lost his equipment when he felt all along that he had complete protection. I suggest that you have your attorney make a current review of your order forms, your contract forms and your note forms. Changes occur from time to time in the state laws, and you should have your forms checked periodically.

Once you have taken a time payment contract you are confronted with the problem of whether you should carry the paper yourself or turn it over to a bank or other credit agency, either on a recourse or non-recourse basis. I know that some distributors are reluctant to discount paper with their bank on a recourse basis because they are fearful of setting up a contingent liability, yet at the same time they are perfectly willing to carry the same deals on their own books. They overlook the fact that if they are carrying the paper, they are, in effect, endorsing it and any loss suffered on the paper is their loss.

### Crash of 1929 Revealed Much Paper of Poor Quality

I know that in the '20's many banks took equipment paper from manufacturers or distributors and did not inquire as to the quality of the paper or its collection record. The result was that when we had the stock market crash of 1929 and the volume of business turned downward, these banks discovered that the paper which they had been carrying was of poor quality and much of it was delinquent. At that time, however, it was too late to do anything about it.

Some distributors insist on selling paper without recourse. On consumer items I believe that a non-recourse plan is practical, but on commercial equipment it would be most unusual for any credit agency operating on a necessarily restricted income from finance charges alone to be able to buy the bulk of the transactions submitted. There are many deals which, with the longer profit that the distributor has, are sound for him to take when it would not be sound for the credit agency to buy similar deals on a non-recourse basis.

What usually happens is that these deals are endorsed by the distributor. The end result is that the distributor is endorsing the weaker paper and receiving no part of the finance charge on the good paper.

I believe it is sound for a distributor to discount paper with his bank on a recourse basis if the bank makes its own credit investigation of the customers involved, follows collec-

tions closely enough to know the condition of the paper, and if the distributor secures the money from the bank at a lower rate than the interest or finance charge on the paper.

Personally, I am a strong believer in having the bank make the collections. I have found from experience that if the bank is actually in contact with the purchaser, the bank is in a better position to make a decision on extension of accounts. Also, when it does extend a note it does so with knowledge of what made the extension necessary.

I think you men who have had experience with banks will agree with me that the more your banker knows about your customers the more willing he is to extend credit.

### Discussion of Lease Agreements

One of the current topics of discussion in all phases of installment selling is the leasing of equipment. There are several kinds of leases. Many years ago we had the type of lease which on its face was labeled "Lease Agreement," and yet if you read the document carefully it was actually a conditional sale contract, as title was passed upon the payment of a nominal sum after the rental payment had been made for a certain period of time.

During the war there was developed, particularly in the construction machinery field, a true lease to permit the user of the equipment to charge up the rental payments as expense. He would have a side agreement with the seller giving him an option to buy the equipment at a reduced figure after rental payments had been made for a certain number of months. The seller usually treated the transaction as a sale on his own books and the buyer expensed it, so

## Commercial Refrigeration

that it disappeared completely from the assets of each.

Under the income tax law the seller technically should set up his rental equipment in a separate account, treat the rental payments as income and charge expense for the normal depreciation, which, of course, is much less than the rental payment. If the entire transaction is consummated within the taxable year of the seller, there is no particular problem, but if it goes over into two taxable years it can create income tax difficulties.

Peculiarly enough, the Internal Revenue Department has never probed too deeply into these deals from all the information I have been able to gather. I have had an explanation of this to the effect that they did not care what was done when tax rates were increasing, as they would catch up with the user of the equipment in subsequent years and eventually get more money than if they had forced him to capitalize the equipment in the year in which he first used it.

If tax rates should decrease, then those who have used the rental plan would benefit because they would have been able to charge the rental payment to expense as a deduction against a high tax rate. However, the trend in rates has been the other way.

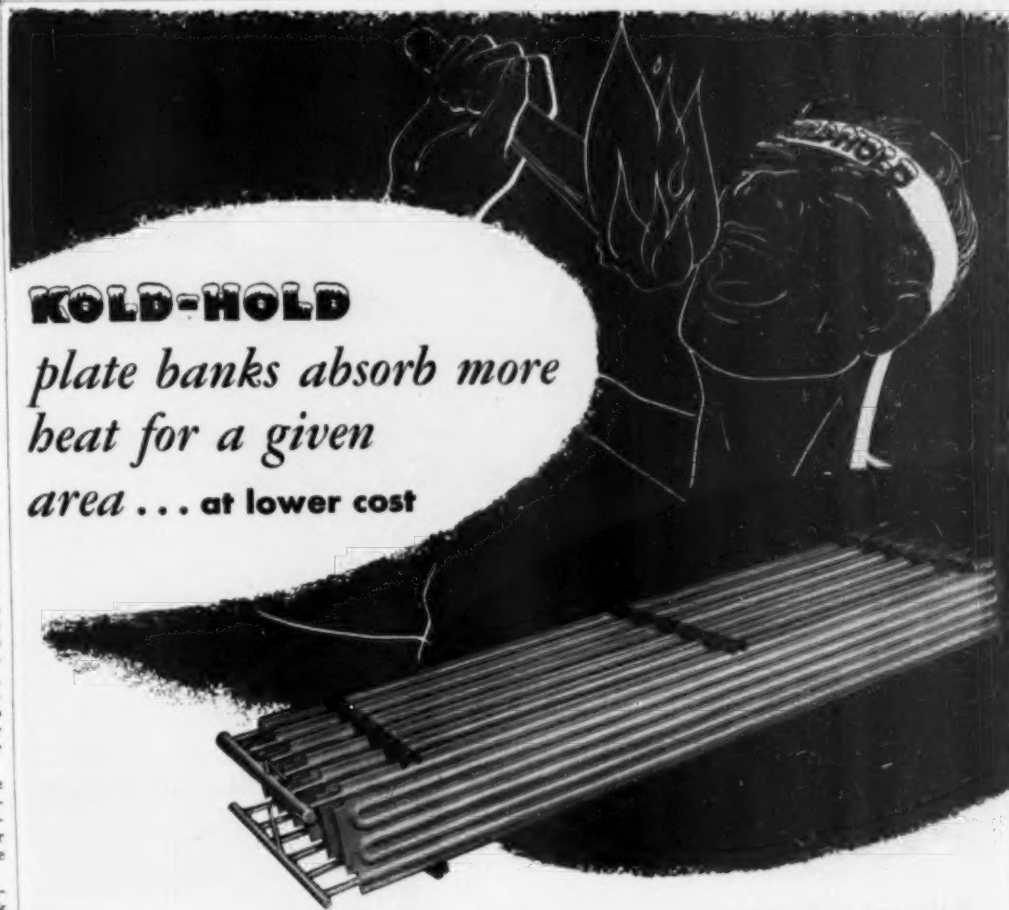
Let us take a look at a rental

transaction as against a purchase transaction. Assuming that a piece of equipment has a life of eight years, the company would have 12½% of the value as a tax deduction in each year for the full eight years. On the other hand, let us assume they rent the equipment for a period of four years, in which case they have a 25% tax deduction for four years and after that they have no tax deduction whatsoever.

If the tax rate is level, the net result at the end of eight years is exactly the same whether they rent or buy the equipment. If the tax rates should go up, as they have been doing, those who have rented equipment have actually lost.

I believe there have been many misconceptions regarding the value of rental plans as compared with purchase plans. However, there is one other factor which cannot be overlooked. If the buyer is undercapitalized, it may be possible for him to get his equipment on a rental basis when he could not buy it.

In your particular field I think you will agree that anyone who wants to buy can find someone who will sell. Therefore, I am unable to understand the demand for rental transactions except for the fact that I am quite certain that the buyer has not thought through to the ultimate conclusion—that the end result in either case is about the same.



**KOLD-HOLD**  
plate banks absorb more  
heat for a given  
area . . . at lower cost

The reason "Serpentine" Plate Banks cool large areas so quickly and economically is they have a much greater heat absorbing area within a given space. This is due to their patented "Serpentine" design which gives them the equivalent of 100% prime surface. The refrigerant flows through the plates in the channels formed by joining a flat metal sheet to an embossed metal sheet. Thus, the refrigerant is in direct contact with the surface and the entire surface of each plate is effective heat transfer area.

When a number of "Serpentine" Plates are joined

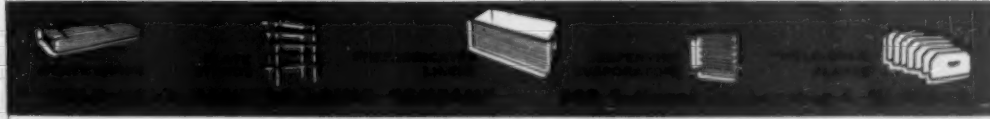
together, they provide the maximum in refrigeration in a compact bank unit.

You need no additional medium of heat exchange with Kold-Hold Plate Banks. There are no extras to buy. Simple fittings make possible easy installation almost anywhere by merely connecting to the main refrigerant line. As Plate Banks have no internal tubing or piping, their weight per square foot is extremely low and installation is simplified.

A detailed description of the advantages and uses of Plate Banks is found in the new Kold-Hold Catalog. Write today for your free copy.

**KOLD-HOLD**

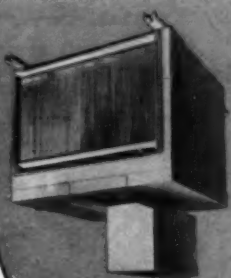
protects every step of the way



**EVAPORATIVE  
CONDENSER**

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**KRAMER**

Unmatched in the industry  
for its trouble-free operation.  
2 to 10 ton models.



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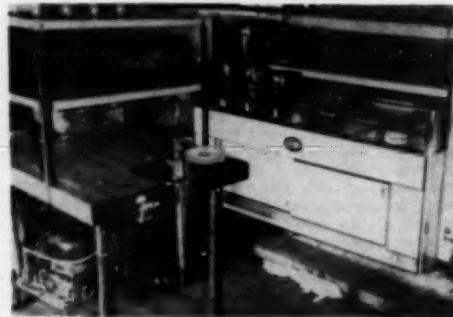
**KRAMER TRENTON CO. - Trenton 5, N.J.**



## RESTAURANT & BAR EQUIPMENT

OPEN CASE in kitchen of famed Schuler's restaurant in Marshall, Mich., keeps delicate salads under constant refrigeration and speeds serving of customers.

ANOTHER OPEN case in Schuler's kitchen keeps bulk quantities of such things as apple sauce, etc., under refrigeration and yet readily accessible for serving. Note unit for case at lower left.



### Open Display Case for Salads and Juices In Restaurant Keeps Them Fresh and Speeds Serving

MARSHALL, Mich.—"Then I discovered Schuler's restaurant, which I believe is one of the finest proofs to be found anywhere of the 'better mousetrap' theory. Schuler's, however, goes Ralph Waldo Emerson one better by proving that the quality of the cheese you put in the mousetrap is even more important than the construction of the trap itself," writes a well known veteran Detroit newspaperman.

"Schuler's, situated in this small city just east of Battle Creek on U. S. Highway No. 12, is simply unbelievable. If I had found the Taj Mahal in Marshall, Mich., I wouldn't have been more astounded. It not only is one of the best restaurants in the country but one of the largest." Amen!

Naturally, highest quality food and best methods of cooking must be combined to achieve such praise as the above plus recognition by many gourmets as one of the nation's finest eating places. (Prices are surprisingly low, too.)

#### REFRIGERATION WORKS HARD

Refrigeration also plays an important role in Schuler's success. Not only is there a lot of it (and the restaurant works it harder than most) but it's selected for maximum kitchen efficiency, not just good storage temperatures.

And the establishment makes extensive use of air conditioning.

Seating 450 persons at a time, Schuler's serves an average of 1,500

to 1,000 on weekdays. The weekend trade zooms this figure to 2,800 on Saturdays and Sundays, according to John O'Leary, who supervises the operation.

Obviously, diners flock to this mid-western food Mecca from many miles away, for the town's population is a mere 6,000.

To accommodate them, there are four large dining rooms and three lounges in the establishment, which has been operated by the Schuler family for about 20 years.

Albert Schuler, Sr., manages the hotel in Marshall while one of his sons, Winstead ("Win") Schuler, operates the dining rooms. Another son, Albert, Jr., is in charge of their hotel at Grand Haven, Mich., and

a daughter serves as the housekeeper of the Marshall hotel.

Serving as many meals as it does, the kitchen at Schuler's in Marshall is large and efficient. To achieve this efficiency and yet maintain its high standards for food, the kitchen really gives its refrigeration equipment a workout.

"We put a terrific load on our equipment, and what would last 15 years elsewhere lasts us about six years," comments O'Leary.

#### 2 OPEN DISPLAY CASES

Perhaps the most unusual refrigeration application in Schuler's kitchen is the use of open display cases—the same kind that were originally designed for self-service market operation. There are two of these, a Sherer-Gillett 10-ft. case (UL27-10-CFR) and a 6-ft. model (UL27-06-CF).

The former is a double-duty design with sliding doors on both front and rear and is fitted with a narrow workboard-shelf at the rear.

This is used for salads, juices, shrimp cocktails, etc.

"It saves us a lot of time," declares O'Leary. "It permits the salads to be kept in full view under refrigeration and gets away from all the confusion of opening and closing doors to load or unload during the rush periods.

"This way we can make the salads up in advance and keep them under refrigeration all the time. Salads will begin to wilt in five minutes unless they're refrigerated.

"Previously when we were using the conventional reach-in boxes," recalls O'Leary, "we were continually reminding the waitresses 'to leave the salads alone or their tops will wither'."

#### SALADS RUSHED TO CUSTOMERS

What happened under the old system was that in their haste to cope with the rush at lunch and dinner hours, the waitresses would take the salads out of the refrigerator a little ahead of time, he explains. Now they merely walk by the open refrigerated case and select the salads ordered, which are then immediately rushed to the waiting customers.

The other open case—the 6-ft. double duty model—isn't in quite the hot spot of the salad case, but it does save considerable time in the handling of such things as apple sauce, etc. in the larger bulk cans.

These two cases are only two of several employed by Schuler's in the

kitchen. Observers note that quite a few of the kitchen boxes are fitted with sliding doors.

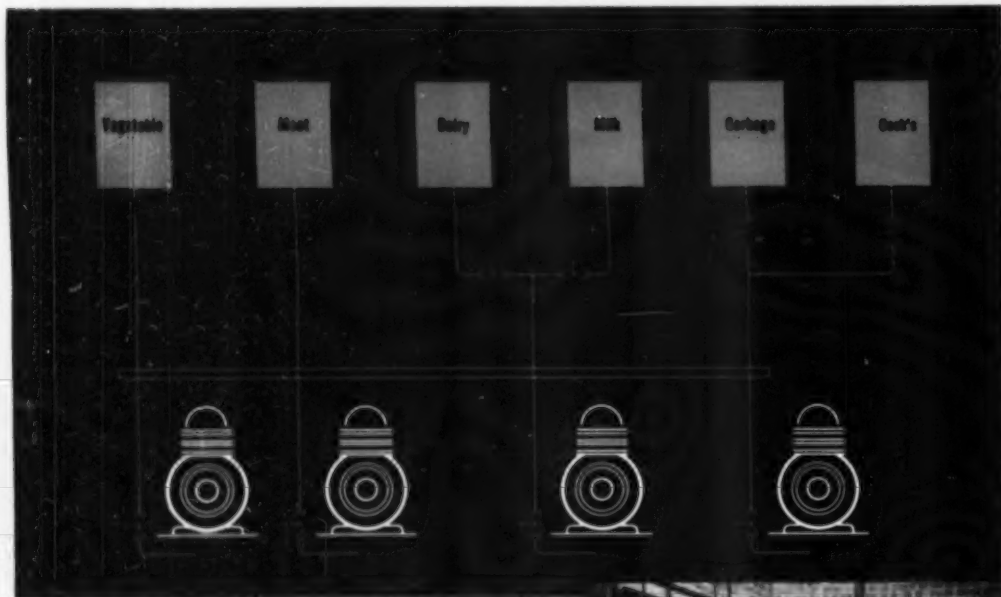
"We're growing more and more interested in sliding doors," comments O'Leary. "They save considerable space and don't block busy aisles when the doors are open."

This is especially important, for example for those reach-ins located right at the point of cooking. For example, there is such a box with sliding doors which stands in line with, and between, a large deep fat fryer and a broiler.

Small quantities of foods likely to be cooked soon are kept in these refrigerators so there is only the barest minimum of time that the foods are out of refrigeration before they're being cooked.

It is in such locations, directly between two heat-producing appliances, that the refrigeration equipment is subjected to unusually heavy duty and thus has its efficient life considerably reduced, as O'Leary pointed out.

### UNUSUAL REFRIGERATION SYSTEM USES ANACONDA Copper Tubes

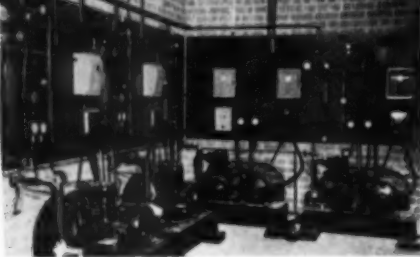


No cooler shutdowns here for compressor repairs. Any one unit can be isolated.

### 4 compressors keep 6 coolers at different temperatures



Six walk-ins are a feature of the up-to-date refrigerating equipment in the spanking-new Memorial Hospital in Butte, Montana. Each maintains a different temperature range. There's small chance they'll ever fail to give round-the-clock service. The six coolers receive their refrigerant from four compressors. Should one unit fail, it can be instantly shut off for repair. A valve at the manifold does the trick. The other three units then carry the load.



Bank of 4 compressor units is equipped with Anaconda Copper Tubing and easily installed American Vibration Eliminators. Arctic Refrigeration Service, Butte, Montana, made this interesting installation with Anaconda Copper Tube.

ANACONDA Refrigeration Tubes have a smooth, bright inside surface. They are uniformly soft for easy bending and flaring. Thoroughly cleaned and dehydrated beyond A.S.R.E. requirements, they are sealed and packed in single coil cartons for protection and easy handling.

For ANACONDA Copper Tubing and other ANACONDA Products see your regular wholesaler. He can give you reliable service. The American Brass Company, Waterbury 20, Connecticut. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

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**ANACONDA**  
refrigeration products

These Anaconda Products for the refrigeration industry may be obtained through your wholesaler: Copper Tubing—Restrictor Tube—Brazing Tube—Thermal Expansion Bulbs—Formed Tube Parts—Hard Copper Tube cut to length—Copper Water Tube in coils or straight lengths—Fittings—Vibration Eliminators—Flexible Metal Conduit.

designed  
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need

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CONDENSERS**

Any type... brazed... crimped... clean... tight... highest quality... prompt service... low cost.

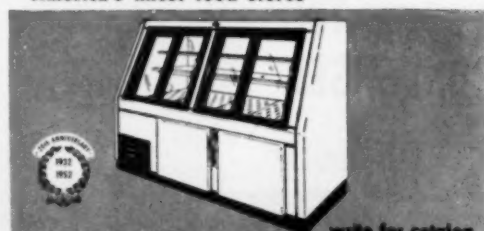
WRITE FOR DETAILS

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Specialists in  
Manufacturing Evaporators and Condensers  
DOWAGIAC, MICHIGAN

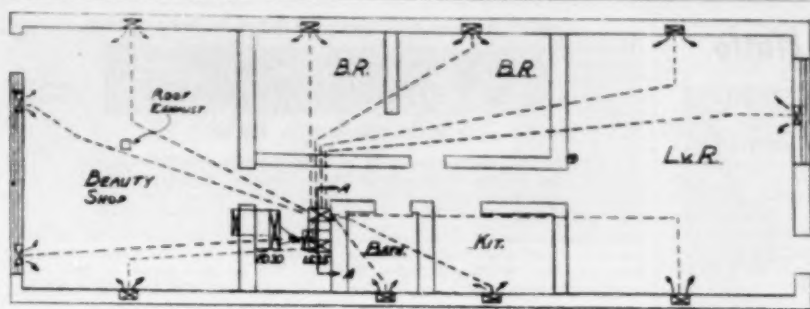
# Buy Bally

Refrigerated Display Cases  
...celebrating 20 years of serving  
America's finest food stores



V-86 WALL CASE (illustrated)  
... ONE OF 62 MODELS AND SIZES  
Bally CASE and COOLER CO., Bally, Pa.





SCHEMATIC DIAGRAM shows floor plan and air outlets for combination beauty shop and living quarters. No air could be circulated between the two sections because of health department rules.

## Low Cost High Velocity Distribution System Solves Heating, Cooling Problem for Combination Beauty Shop, Living Quarters

HILL CITY, Kans.—When an air conditioning engineer is tossed a problem like this one, he really has to scratch his head to come up with something that pleases everybody and still works.

E. F. Cassing of General Heating & Cooling Co. in Kansas City, Mo., had his hands full when he was called upon to lay out an air conditioning system for the Marguerite Jones Beauty Shop here.

The beauty shop was in the front half of a new one-story structure designed for business in the front section and living quarters in the rear.

By the time Cassing got on the job the building had been completed except for the floor. There was no basement, no attic, and interior walls were of concrete with no air space. The owners wanted the entire

building air conditioned and no ductwork showing. The health department forbade circulating air from the beauty parlor to the living quarters and vice versa. Only space in the building for the air conditioning and heating equipment was divided on either side of a hall corridor.

The heat load was about 94,000 B.t.u. and the cooling load 38,000 B.t.u. Only a portion of the building was to be cooled at any one time but the entire area was to be heated.

With that information, Cassing scurried back to his drawing board and slide rule. This is what he came up with—and it worked to everybody's satisfaction.

A 3-ton General Electric FD-30 package air conditioner was installed on the side of the corridor adjacent to the beauty shop. A portion of the air was projected by register to the 25 by 25-in. furnace filter rack on the General Electric LG-25 warm air conditioner opposite. The furnace blower picked up this air and distributed it to the floor distribution system. This eliminated a duct across the hallway.

The remainder of the air was discharged directly through the concrete wall into the beauty shop. The air stream was directed upward toward the ceiling to avoid drafts.

From the warm air conditioner, air for both cooling and heating was discharged into an insulated floor plenum and then through 4-in. round pipes to registers set in the outside walls of each room. Dampening was

accomplished at the floor plenum and not at the register.

The General Electric air wall distribution system was used. In all, 11 runs to outside walls were made through the 4-in. pipe. Velocity on each pipe was estimated at 1,000 c.f.m. Yet the special cast aluminum registers delivered about 65 c.f.m., spraying the air upward and outward along the wall in a radius of 180°.

This heated and cooled the outside walls. In the off cycle, the walls actually continued to radiate heat giving a minimum temperature differential and greater comfort.

Automatic registers were used under the large front glass window. They operated in such a manner that

when the thermal element was satisfied, the damper plate turned slowly to the closed position. If the thermal element called for heat the operation was reversed.

Through all registers, the air moved against the wall at all times. It moved upward and across the ceiling to the inside wall. No floor drafts were obtained.

The return air problem was solved by complete exfiltration of air on the beauty parlor side. A wood louver was provided just above the door on the entrance side.

For winter operation it is only slightly opened. For summer it is opened further. Much heat is added from electric dryers and therefore 100% exhaust is very desirable to kill odors.

Cassing said that this system has now operated through a cooling season and two cold spells of approximately 7° F. The customer, he said, was exceptionally well pleased because comfort was obtained with no objectionable drafts, warm floors, warm walls, freedom in placing furniture, and quietness of operation.

Cost of the installed system, he asserted, was about 25% less than estimated by competition, due probably, he believed, to the small high velocity distribution system.

## G-E Appoints Robertson Marketing Manager for Heating, Cooling Dept.

BLOOMFIELD, N. J. — R. C. Robertson has been appointed manager of marketing of General Electric Co.'s Home Heating and Cooling Dept., according to B. J. Levine, general manager of the department. Robertson, who joined General Electric in May, 1951, was formerly manager of direct sales for the company's Air Conditioning Div.

Prior to coming to G-E, he was eastern district manager of Superior Valve & Fittings Co. He has also served as assistant general sales manager and manager of national accounts with Chrysler Airtemp, and has been associated with York Corp. and Carrier Corp.

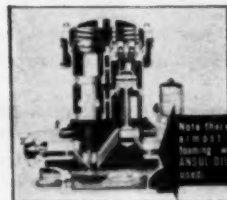
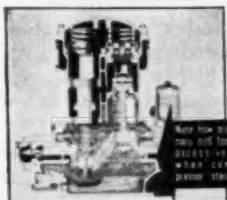
Robertson is a past chairman of the New York section, ASRE.



CHOICE OF THE INDUSTRY  
Since 1927



NOTE THE DIFFERENCE BETWEEN  
ORDINARY OILS... WHICH FOAM  
... AND ANSUL NON-FOAMING  
REFRIGERATION OIL



When a compressor starts, the surge of the refrigerant causes ordinary oils to foam. This results in a loss of oil from the compressor and causes other harmful effects in the system. ANSUL NON-FOAMING OIL eliminates the problems which result from foaming and thereby insures maximum lubricating efficiency.

NOW... MORE THAN EVER... ANSUL is the FINEST REFRIGERATION OIL at any price! In addition to the features which have made it outstanding in the past... High Lubricity, High Stability, Low Moisture, and Low Wax... a new and vital improvement has been made... ANSUL OIL IS NOW PROCESSED TO PROVIDE NON-FOAMING CHARACTERISTICS... a distinct advancement in the science of refrigeration lubrication.

Here are some of the advantages provided by the NON-FOAMING characteristic of ANSUL OIL:

- INSURES MAXIMUM LUBRICATION.
- IMPROVES EVAPORATION EFFICIENCY.
- PREVENTS DAMAGE TO COMPRESSOR VALVES.

- REDUCES DANGER OF PLUGGED CAPILLARIES.
- REDUCES DEPENDENCY ON OIL SEPARATORS.

ANSUL is the LARGEST SELLING REFRIGERATION OIL sold through Refrigeration Wholesalers... EXCLUSIVELY. And there are many other reasons why refrigeration men persistently prefer ANSUL.



**ANSUL**  
Chemical Company

REFRIGERATION DIVISION • MARINETTE, WISCONSIN

ANSUL SHIFON BLENDED • ANSUL METHYL CHLORIDE • ANSUL ON • KINETIC "FROST" REFRIGERANTS • ALSO MANUFACTURERS OF INDUSTRIAL CHEMICALS AND DRY CHEMICAL FIRE EXTINGUISHERS

## JE SOLENOID VALVES

Made Better to Serve Better

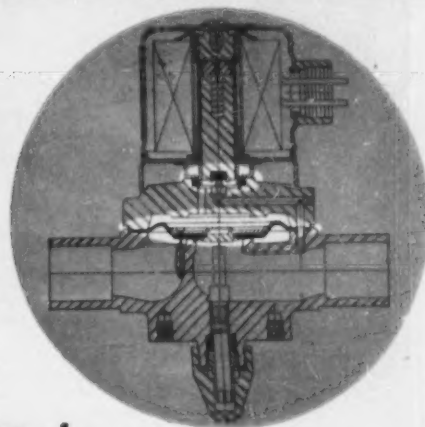
A SERIES OF DEPENDABILITY FEATURES

No. 1  
Tight Seating

THESE PILOT-OPERATED VALVES have a composition main seat disc and a composition pilot seat disc. These materials were selected in cooperation with the U. S. Government and thoroughly tested in life breakdown tests.

This new JE design offers tight seating at any pressure within the operating range, and there is no "bubble tolerance" in our assembly, or testing lines. To make sure these Valves close tightly at all times, we have introduced "spring loaded" closing action.

5 Features of Dependability in JE

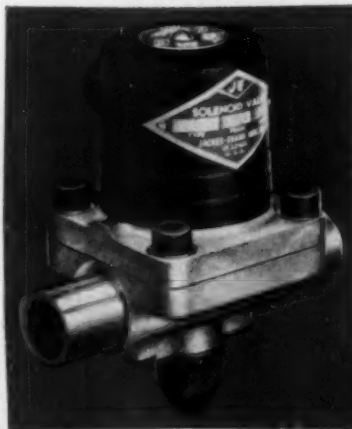


## SOLENOID VALVES

- 1 TIGHT SEATING — No bubble tolerance
- 2 SIMPLICITY — Only two moving parts
- 3 LONG LIFE — Cool Coils
- 4 DURABILITY — All corrosion-resistant materials
- 5 OPENING PRESSURE DIFFERENTIAL — higher than most others on the market.

May we submit samples for your test and approval? Write today for details.

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Published Every Monday by BUSINESS NEWS PUBLISHING CO.  
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.  
New York office: 521 Fifth Ave., Telephone Murray Hill 7-7158.  
Chicago office: 134 S. LaSalle St., Telephone Franklin 2-8088.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$3.00 per year; 2 years \$6.00. All other foreign countries: \$7.00 per year. Single copy price, 30 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

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VOLUME 67, No. 7, SERIAL No. 1,230, OCTOBER 13, 1952

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

## Adventure In Integrity

BEFORE 1914 there was no generally accepted means of measuring a publication's circulation. There were no standards of circulation values. If a publisher honestly claimed a circulation of 15,000, he might find himself bucking a competitor's claim of 25,000, which by actual count might have been considerably lower.

Likewise, advertisers were placed in the predicament of not knowing who read a specific publication. This made it impossible to plan an advertising campaign that would reach and cover specific markets. A group of publishers and advertising men, seeing this mutual need for dependable facts and figures on circulation, formed a cooperative association which they called the Audit Bureau of Circulations.

Since that day the Bureau has had its experienced auditors make annual audits of the circulation records of each publisher member. The reports from these audits have been made available to all, enabling a judgment of the publication's worth based on definite standards and values. From its very inception, ABC has stood for common understanding and trust within the advertising and publishing industry. It has enabled the establishment of circulation standards which publishers can use in answering such questions as: "Who reads the publication? Where does it go? How much do people pay for it?"

Today 370 business publication members of ABC (out of some 1,800 trade papers) have indicated through their membership that they realize the value of throwing out circulation guesswork.

The establishment of set circulation standards has had far-reaching effects on the publishing business as a whole. By enabling investment in advertising on the basis of facts, ABC has contributed to greater advertising effectiveness. In turn this has helped sales, production, and employment to rise—while lowering unit costs.

Where do you, Mr. Reader, benefit? The answer is obvious: in the editorial content of a paid-circulation publication.

Editorial content is the guts of a publication. If there is meat in the editorial pages, you read the magazine. It helps you do your job quicker, more efficiently, with greater profit.

ABC standardization of paid circulation techniques is the behind-the-scenes force that makes for editorial quality. You, the reader, indicate that we are a helping hand by paying to read what we have to say. The ABC audit of our circulation shows us you do. It also shows us when we cease to serve you effectively.

This constant check of your interest keeps us up on our editorial toes. Makes us an editorial leader—not a follower. In short, we have a contract with you, our subscribers, to deliver a specific number of issues of a specific editorial character for a specific length of time at a specific price. Our very existence depends on your continued acceptance. We must help and interest you in order to stay in business.

In an era where the Government runs controlling agencies in such fields as security sales, food and drugs, life insurance, and banking, ABC is unique. Here is self-regulation in a highly developed and successful form. Because we have this free association of people engaged in advertising and selling, because we have banded together to protect ourselves and the reader, there has never been a need for a Federal Bureau of Circulation Audit.

AIR CONDITIONING & REFRIGERATION NEWS is proud to be an ABC member. Proud to display the ABC symbol wherever the eyes of advertisers and readers meet the name. This symbol tells you that we have agreed to consider your interests first.

## Have You READ 'Peace and Progress' Yet?



about the new

## BTC ICE CREAM Display Case



MODEL 555310-40 Features superstructure and 3-dimensional picture. Cabinet and superstructure are fluorescent-lighted. Height: 58".

Now BTC presents a new ice cream merchandiser—one styled from top to bottom to make sales for you and your customers!

Look at the smart lines—the sparkling glass front—the extra construction features that insure even temperatures throughout. Then compare this display case with any other cabinet and you'll know why it deserves a place on your showroom floor.

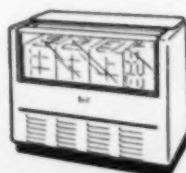
Get the facts on this new BTC Ice Cream Display Case—and profitable BTC franchise—by writing The Brewer-Titchener Corporation. But do it now, while you're thinking about it!

**SPARKLING GLASS FRONT** Quadruple Thermopane glass front can't be beat for building up ice cream sales!

**EXCLUSIVE HIDE-A-WAY LID** Fully-insulated and self-contained—slides under rear deck, out of sight.

**BIG INSIDE, COMPACT OUTSIDE** Actually holds 420 pints—yet fits in a floor space only 53" by 30"!

**BETTER REFRIGERATED** Ice cream stays frozen thanks to 6 lateral plates and baffle glass between packages and window.



MODEL 555310-6 Has fluorescent-lighted interior, comes without superstructure. Height: 40".

DISPLAY BTC CASES

The BREWER-TITCHENER Corporation

BINGHAMTON • NEW YORK



## Service & Supplies

### Henn Named Asst. Mgr. of NAPRE Meeting To Be Schnacke Compressor Sales Held In Dallas Nov. 12

EVANSVILLE, Ind.—B. W. Henn, formerly of Cleveland, has been appointed assistant sales manager of Schnacke, Inc. in charge of sales of compressors and condensing units from 5 hp. to 60 hp. through sales representatives in 42 cities in the United States.

This also includes the line of home air conditioners recently developed by the firm for air conditioning the entire home through regular heating ducts.

Schnacke sells direct to all established air conditioning contractors and there are no exclusive distributors or franchised accounts.

In the Tri-State area only, Schnacke Contract Div. engineers and installs all types of air conditioning and refrigeration jobs from 3 tons to 350 tons.



B. W. Henn

CHICAGO — The Dallas Chapter, National Association Practical Refrigerating Engineers, will be host to the 43rd annual convention of the national group to be held Nov. 12, 13, and 14 at Dallas, Texas.

This was announced recently by A. R. Carlson, president, NAPRE, and chief engineer of Railways Ice & Service Co., Chicago.

Fourteen technical papers and discussions are to be presented at the convention.

Speakers' subjects range from design of air conditioning systems to the design of cold storage plants; from testing and rating of refrigeration blower coils to the latest trends and developments in evaporator designs; from the education of an engineer, to operating and maintenance procedures; from automatic plant operation to refinery refrigeration, and from refrigeration on rails to modern brewery practice; and from precooking processes to fast freezing practices.

An outstanding feature of recent conventions, the Bureau of Refrigeration Information, will be continued at this meeting with 20 experts from such cities as Washington, D. C., Seattle, Miami, Chicago, and Los Angeles available to answer problems of the visiting engineers and plant managers.

Additional attractions include a field trip to the largest cold storage plant in the world, the Alford Refrigerated Warehouse located at Dallas.

Tom Weatherford, president of the Dallas Chapter, NAPRE, has invited the Southwestern Engineers' Conference meeting in Dallas for two days preceding the NAPRE gathering, to be guests of the convention. Headquarters will be at the Adolphus hotel, Dallas.

### July Sales of Appliances, Specialty Wholesalers 70% Above 1951

WASHINGTON, D. C.—Appliances and specialties wholesalers topped all other wholesalers by far in their percentage increase in July sales over July, 1951, figures released by the U. S. Bureau of the Census revealed.

In surprising contrast, their sales for the first seven months of the year showed the largest percentage decline from the same 1951 period of any other wholesaling category except industrial chemicals.

July sales of appliances and specialties wholesalers were 70% higher than in July, 1951. Next best increase was made by furniture and home furnishings wholesalers, whose sales were up 30%. Commercial refrigeration and parts wholesalers recorded a 25% gain over July of last year.

As compared with June, July sales of appliances and specialties wholesalers jumped 16%, topped only by wholesalers of shoes and other footwear, beer, and clothing and furnishings. Commercial refrigeration and parts wholesalers made a 5% gain over June.

However, for the first seven months of the year, appliances and specialties wholesalers found their sales 14% under those of the same period in 1951. Only the industrial chemicals group surpassed this drop. Sales by commercial refrigeration equipment and parts wholesalers were down 3%.

Inventories of the appliances and specialties group showed a 29% drop from July, 1951, and an 11% drop from June, 1952. Respective figures for the commercial refrigeration group were -16 and -2% respectively.

#### Sales

Kind of Business and Geographic Division	Per Cent Change			July 1952 Panel	
	July 1952 from July 1951	July 1952 from June 1952	7 Mos. 1952 from 7 Mos. 1951	No. of Firms Reporting	Reported Dollar Volume (add 000)
Appliances and specialties wholesalers	+70	+16	-14	137	28,961
New England	+86	+31	-21	13	1,822
Middle Atlantic	+75	+32	-26	26	10,908
East North Central	+62	+6	-34	19	3,697
West North Central	+54	-1	-16	13	2,145
South Atlantic	+90	+15	+9	21	3,155
South Central	+66	+3	+13	14	2,239
Mountain	+40	+6	0	8	1,400
Pacific	+35	+2	-3	14	3,119
Refrigeration equipment, parts (com'l)	+25	+5	-8	74	3,839
Middle Atlantic	+15	+7	-1	14	813
East North Central	+23	+3	-4	23	490
West North Central	0	+30	-29	5	163
South Atlantic	+34	+4	+1	19	772
Pacific	+18	+19	-14	9	265

#### Inventory, End-of-Month (At Cost)

Kind of Business and Geographic Division	Per Cent Change			July 1952 Panel	
	July 1952 from July 1951	July 1952 from June 1952	7 Mos. 1952 from 7 Mos. 1951	No. of Firms Reporting	Reported Dollar Volume (add 000)
Appliances and specialties wholesalers	-29	-11	100	137	28,961
New England	-15	-6	30	13	1,491
Middle Atlantic	-42	-17	34	26	4,797
East North Central	-16	+1	15	19	3,116
West North Central	-30	-1	13	13	3,326
South Atlantic	-25	-12	30	21	3,827
South Central	-25	-8	12	14	2,336
Mountain	-9	-16	8	8	1,960
Pacific	-36	-29	11	14	2,547
Refrigeration equipment, parts (com'l)	-16	-2	62	74	3,839
Middle Atlantic	-26	-8	11	14	813
East North Central	-25	-7	16	23	490
West North Central	-17	+30	5	5	163
South Atlantic	-3	+6	18	19	1,067
Pacific	-13	0	8	9	265

### CHOICE OF THE INDUSTRY Since 1927

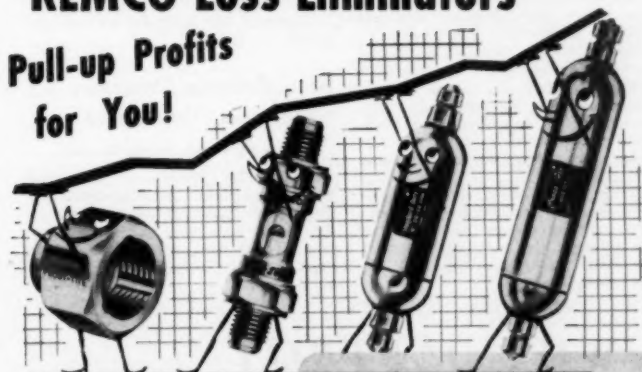
#### Quality

Refrigerator Door Gaskets and Accessories

JARROW PRODUCTS

### REMCO Loss Eliminators

Pull-up Profits for You!



#### FROST-TITE

Frost-relieved Flare Nuts, guaranteed not to creep, loosen or crack. A must for lowside applications. Should be used everywhere in the system.

#### E-2-SEE

100% foolproof Liquid Indicators. Guaranteed to eliminate losses from leaking. With new "FLO INDICATOR" flap to indicate all variations of flow.

#### STANDARD-DUTY DRYERS

The lowest-cost, most efficient molded driers on the market. Ideal for use by original equipment manufacturers and for field installation or service replacement. Available with either Molded REMCAL or granular Silica Gel. Cap. 1/4 to 1 1/2 HP.

SEND FOR DESCRIPTIVE LITERATURE

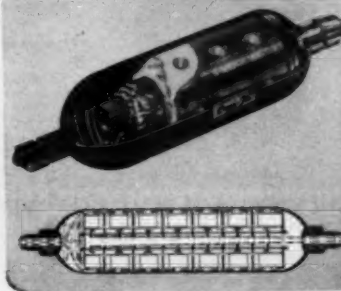
**REMCO**  
INCORPORATED  
ZELLENFELD, PENNSYLVANIA

Carried in Stock by Leading Wholesalers

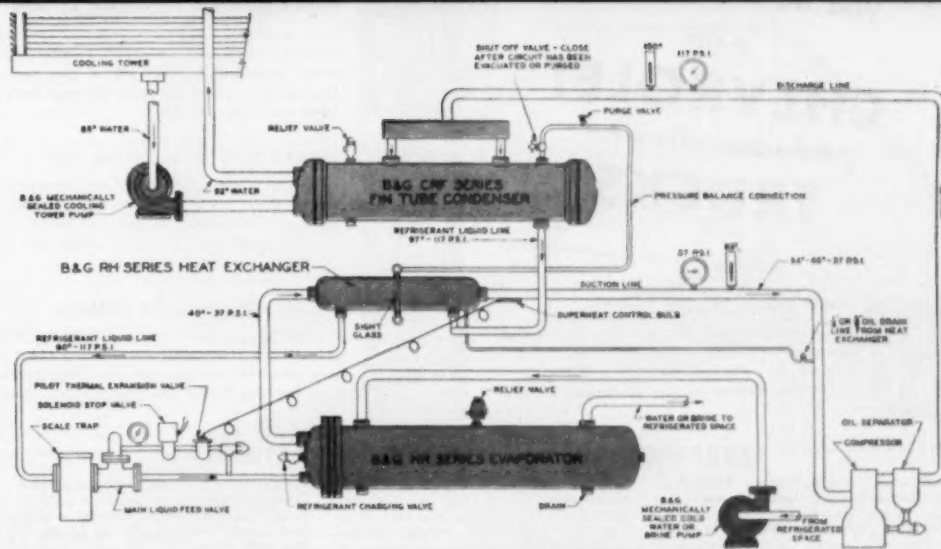
### NEW Cross-Flo

POSITIVELY THE MOST EFFICIENT DRIER-FILTER MADE!

New Cross-Flo is now greatly improved — with new REMCAL super-strength drying element, and new FIBERGLAS Depth Filter. New Cross-Flo guarantees increased flow area, increased moisture-absorbing capacity, increased filtering capacity, all-around improved efficiency that positively does away with pressure drop, premature clogging, and plugging. See it now at your wholesalers.



## Matched UNITS FOR Matchless PERFORMANCE



Typical refrigeration system, using B & G Equipment

By specifying B & G Refrigeration Equipment throughout you receive the benefits of a completely integrated installation . . . plus the advantage of a guarantee from a single manufacturer.

B & G Condensers, Evaporators and Heat Exchangers are designed to deliver maximum tonnage with minimum operating expense. These units give long, trouble-free service—because they are built right—and have proved it in the field. You'll be particularly interested in the design

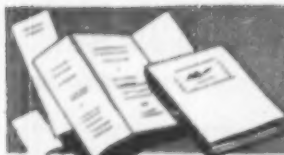
of the B & G Evaporator, which prevents oil-trapping in the head passes—a warranty of more efficient and dependable performance.

As for pumps, you can spot superiority the moment you lay eyes on a B & G Series 1522 UNIBUILT. Among the many features of this pump are the leak-proof Mechanical Seals—hydraulically and dynamically balanced impellers—standard motors and interchangeable parts.

Send today for a complete file of B & G Catalogs.



**Hydro-Flo**



## Current LITERATURE available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

### Reynolds Metals Prepares Book on Aluminum Forming

—KEY NO. N-1020—

LOUISVILLE, Ky.—How to draw and form aluminum sheet, plate, tubing, and pipe is detailed in a new 148-page technical manual called "Aluminum Forming," recently published by the Reynolds Metals Co. The manual points out that the most common mistake is the attempt to work and form aluminum by the identical techniques used for other metals. The book is devoted mainly to a detailed explanation of how to form aluminum as it differs from other metals.

Two important sections are devoted to metallurgical data. One is on aluminum sheet and plate. The other is on aluminum pipe and tubing. The other two sections discuss the various methods of working these two classes of products.

Made in 6 by 9-in. pocket size, and ring bound to open flat, the manual also contains four index tables (illustrations, formulas, tabular data, cross index of 17 pages), 230 illustrations, 22 tables, and 32 formulas.

Written by E. V. Sharpnack, Sr.,

chief forming engineer for Reynolds, the manual was edited and produced by G. W. Birdsall, director of the company's editorial service.

The manual will be sent without charge to engineers, designers, plant personnel, and others who request it on company letterhead.

### Catalog Describes U. S. Unit Heater Line

—KEY NO. N-1021—

DETROIT—A new catalog covering U. S. unit heaters is announced by W. C. McCord, president of United States Radiator Corp.

On request, the new catalog will be sent to any heating engineer, heating contractor, wholesaler, architect, or builder—without charge.

This catalog will be helpful to anyone who makes calculations and layouts for heating installations. The catalog covers such points as heater location, various types of unit heater wiring diagrams, steam pipe sizes, capacity data, and all necessary technical information for making a unit heater layout.

Each type of U. S. unit heater is illustrated.

### Spec Sheet on Sodamaker Issued by Superior

—KEY NO. N-1022—

ST. LOUIS—A specifications sheet illustrating and describing the Superior "Sodamaker" beverage dispenser has been issued by the Superior Refrigerator Mfg. Co. here. The Sodamaker is made in three models.

### 'Tale of Tyler' Marks Firm's Silver Anniversary

—KEY NO. N-1023—

NILES, Mich.—"25 Years of Food Merchandising—The Tale of Tyler," a 50-page, "Life"-size booklet highlighting 25 modern food stores, 25 food merchandising ideas, and Tyler's 25 years of experience in commercial refrigerator manufacturing, has just been released by the Tyler Fixture Corp. here in commemoration of its silver anniversary.

The booklet contains case histories of 25 modern food stores, most of which were planned through cooperative effort on the part of the store owner, or his architects, the local Tyler agent, and the Tyler store planning department.

Over 90 large photographs taken in these stores illustrate many new ideas in store arrangement and equipment, including Tyler commercial refrigerators, refrigerated display cases, walk-in coolers, refrigerated display tables, and storage freezers.

The booklet also features 25 tested and proven merchandising ideas compiled for use by the retail food merchant, or by the commercial refrig-

erator dealer in promoting the sale of equipment.

These merchandising ideas come under such headings as "Packaged Picnics," "Put Juices With Produce," "Frozen Bakery," "Combination Packages," "Dump Table Specials," "Sign Language," "Color Sells," "Try a 19-Cent Case," "A Baker's Dozen," "Profit From Diets," "Impulse Poultry Sales," "Fish Day," "Cheaper By the Dozen," "Shelves For Related Selling," "Economy Dinners."

A complimentary copy of the new 50-page booklet can be obtained by writing the Tyler Fixture Corp.

### Catalog Describes 200 Laboratory Thermometers

—KEY NO. N-1024—

SPRINGFIELD GARDENS, N. Y.—More than 200 different laboratory thermometers are described and priced in a catalog issued recently by the Brooklyn Thermometer Co.

Called Catalog A-52, the four-page folder also introduces two recently developed thermometers. Free copies are available.

### New Insulation Brochure Issued by Gustin-Bacon

—KEY NO. N-1025—

KANSAS CITY, Mo.—Latest revision and reprinting of its "Ultralite" duct insulation brochure has been issued by Gustin-Bacon Mfg. Co. here. Section 5e in the bulletin illustrates the use of the Bostitch T5-8 outward-clinch staple tacker "used with such success lately to apply the insulation on the job," the company said.

Fifteen pages long and illustrated with "How To . . ." data and pictures, the new brochure explains and demonstrates the thermal and acoustical qualities of Ultralite, Gustin-Bacon's long-length, textile-type glass fiber insulation used in the heating, ventilating, and air conditioning fields.

The bulletin details when to use Ultralite, and in what densities and thicknesses, as both duct insulation and duct liner. Accessory materials, tapes, stapler, adhesives, etc., used to apply Ultralite also are treated, as well as facing types available and where to use them. Step-by-step procedures are given.

### Folder Describes Use of Interlocking Wiring Units

—KEY NO. N-1026—

HARTFORD, Conn.—An eight-page folder on operation and advantages of the new Hart-Lock interlocking wiring devices is offered by the Arrow-Hart & Hegeman Electric Co. here.

How the units eliminate accidental disconnects is described and illustrated. A simple twist locks cap and connector securely; an easy reverse twist unlocks.

Recent improvements in construction are shown, including a new one-piece contact design and optional back-wiring which makes installation easy. Illustrations show typical Hart-Lock applications.

### S. & R. Soda Fountain Co. Offers New 1953 Catalog

—KEY NO. N-1027—

NEW YORK CITY—S. & R. Soda Fountain Mfg. Co. here has its new 1953 catalog ready for distribution.

The new catalog features 18 photographs of some of the units in the new line, and stresses over-all flexibility and quality of merchandise at a competitive price.

S. & R. is a custom builder and will manufacture any style or size of fountain to meet individual requirements. In addition it has a special designing department which is always ready to assist in working out fountain designing problems.

A free copy of this catalog is available.

### Bulletin Describes Stevens Snap-Action Thermostats

—KEY NO. N-1028—

MANSFIELD, Ohio—A new illustrated bulletin on the company's line of snap-action thermostats for operation on wide or narrow differentials is announced by Stevens Mfg. Co., Inc., producer of a wide range of bimetal thermostats for use in appliances, electronic, and avionic equipment.

In addition to suggested applications, the bulletin describes the operating principle and illustrates it with schematic diagrams. Ratings, typical performance curves, dimensions, and construction data are included.

Copies of Bulletin L-4144 titled "Stevens Snap-Action Thermostats" are available on request.

### Case Histories Presented Of Successful Campaigns

—KEY NO. N-1029—

DAYTON — A portfolio entitled "Successful Sales Campaigns," presenting case histories of some of the most successful incentive sales campaigns has been published by Cappel, MacDonald & Co., merchandise prize incentive firm here.

Included is a report on an appliance manufacturer who sold four times as many displays in four weeks as were sold during the entire previous year.

In addition to reporting case histories, the portfolio also includes information on the many motivating forces management can use to stimulate salesmen. Suggested sales campaigns are outlined and some promotional materials illustrated.

Copies of the portfolio may be obtained on request.

### Kato Bulletin Describes Generators, Converters

—KEY NO. N-10210—

MANKATO, Minn.—A four-page folder describing the Katolight a.c. generators, motor generators, d.c. to a.c. converters, and a.c.-d.c. power plants has been published by the manufacturer, Kato Engineering Co. here.

Let these  
plain hard facts show  
you how you'll save  
with  
**CHEVROLET**  
Advance-Design  
**TRUCKS**



Fact  
No. 2

#### EVERY MILE AN ECONOMICAL MILE

For low fuel, oil and upkeep costs you can't beat Chevrolet's time-proven Valve-in-Head engines. Thrift-master or Loadmaster, these engines give you top economy and long life to match the ruggedness of frame, axles and other units.

Fact  
No. 3

#### THERE'S ONE TO FIT YOUR JOB

Right down to wheels and tires, every Chevrolet truck is fitted to the job it has to do—factory-matched to operating conditions and payload. You don't have to waste money on "too much truck" or sacrifice efficiency with "too little truck" for your needs.

Fact  
No. 4

#### VALUE STAYS HIGHER LONGER

Chevrolet trucks traditionally bring more dollars at resale or trade-in than other makes costing about the same when new. You get more value with Chevrolet trucks from first to last. See your Chevrolet dealer.

#### THEY LIST FOR LESS

Yes, Chevrolet trucks list for less than any other comparable truck capable of handling the same payloads. And yet, in a Chevrolet you'll find a combination of great truck features you can get in no other truck.

#### CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

**TWO GREAT VALVE-IN-HEAD ENGINES**—Loadmaster or the Thriftmaster—to give you greater power per gallon, lower cost per load • **POWER-JET CARBURETOR**—for smooth, quick acceleration response • **DIAPHRAGM SPRING CLUTCH**—for easy-action engagement • **SYNCHROMESH TRANSMISSION**—for fast, smooth

shifting • **HYPOID REAR AXLE**—for dependability and long life • **TORQUE-ACTION BRAKES**—on light-duty models • **PROVED DEPENDABLE DOUBLE-ARTICULATED BRAKES**—on medium-duty models • **TWIN-ACTION REAR BRAKES**—on heavy-duty models • **DUAL-SHOE PARKING BRAKE**—for greater holding ability on heavy-

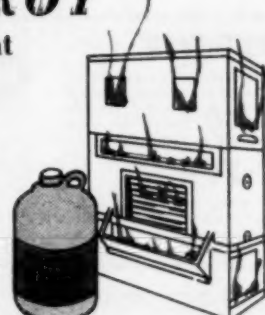
duty models • **CAB SEAT**—with double-deck springs for complete riding comfort • **VENTILANES**—for improved cab ventilation • **WIDE-BASE WHEELS**—for increased tire mileage • **BALL-TYPE STEERING**—for easier handling • **UNIT-DESIGNED BODIES**—for greater load protection • **ADVANCE-DESIGN STYLING**—for increased comfort and modern appearance.

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN



## WHY DESTROY Expensive Equipment by using Destructive Substances?

Chemicals that EAT their way out of Metal, Wood or Plastic containers are injurious to the very surfaces that they are intended to treat. If a glass container should be accidentally broken, the contents could do untold damage to valuable property!



**SOLVEX**  
(In tablet or granular form)

LOWERS HIGH HEAD PRESSURE QUICKLY  
(And May Be Used While Plant is in Operation)

REMOVES RUST, SCALE, ALGAE

And other encrusting matter from Condenser Tubes and Compression Jackets in 1 to 5 days. AND SOLVEX KEEPS 'EM CLEAN.

BE SAFE! USE **SOLVEX!**

Manufactured by

**CHEMICAL SOLVENT CO.**

3005 16th Street, North  
BIRMINGHAM, ALABAMA

Distributed by

**VIRGINIA SMELTING CO.**

WEST NORFOLK, VIRGINIA



# What Was New

At the Dairy Show



F. W. Schulenberg (l.), sales manager for the Anheuser-Busch cabinet division, gives the details on his firm's new model IM-100 frozen food cabinet for island display to dairymen W. A. Morris of Altoona, Pa. and C. F. Mehlich of Pittsburgh. This case is the first the company has made for the frozen food field.



Curiosity leads one Dairy Show visitor to peek through the reach-in service door on the ice cream hardening and distributor's storage vault displayed by the Freezer Box Div. of Annapolis Yacht Yard. The boxes will hold temperatures of from -10° to -25° F. and have capacities of 1,000 gals. and up.



Big feature of the Stanley Knight display was the complete back bar assembly that permits fast food service and fountain service in its entirety. The assembly contains a 40-gallon capacity soda fountain, frying section that includes grill and deep fry units, a hot food unit, a refrigerated sandwich unit, toaster section, coffee section with utility shelf space and a refrigerated pastry storage and display unit.



## "JOB TAILORED" means money saved

• Your cold plate dollar goes further when you specify DEAN because you eliminate waste! You get a plate in the *exact* size you need ... not one that is almost right, but a plate that accurately meets your specifications. You name the size—you name the shape ... we make it!

You can have plates in zinc metalized steel, stainless steel and in other metals. You can get cylinders, U's, angles, tanks, etc., and also plates for boudelot-type coolers.

Using DEAN "job tailored" cold plates means dollars in your pocket on every job. Try them!

### SEND FOR TECHNICAL DATA BOOK

Get the details on DEAN Cold Plates for ice cream cabinets, locker plates, soda fountains, farm milk coolers, farm freezer cabinets, low temperature test rooms, frosted food refrigerators, window displays, food counters, refrigerated transportation and subzero applications for industrial chilling.



**DEAN**  
COLD PLATES

ANY SIZE  
ANY SHAPE  
MOST METALS

**DEAN** PRODUCTS, INCORPORATED  
1042 DEAN ST., BROOKLYN 16, N. Y.  
Sterling 9-5400



Huddled around a scale model of Baltimore Aircell's new 260-ton evaporative condenser are C. Wenzel, Midwest Bottle Cap Co. of Belvidere, Ill. (l.), and J. Engel, president of Baltimore Aircell. The condenser is factory assembled and the largest made by the firm.



First soft ice cream freezer made by Emery Thompson Machine & Supply Co. is shown by R. A. McCluskey (l.), general manager of the company, to R. L. Washburn, Gloversville, N. Y. dairyman. Shipments are already being made on the machine, which will produce 20 gals. of soft product per hour.



Weber Show Case & Fixture Co.'s new candy-striped ice cream cabinet gets the once over from Mrs. Cal Coleman (l.), wife of Weber's Detroit representative and Mrs. A. J. Martin, wife of the Weber district manager in Kansas City, Mo. The candy-stripe is said to increase the attention getting value of the cabinet.

Other pictures of exhibits at the Dairy Industries Exposition were published in the Oct. 6 issue of the NEWS.

**SWEDEN**  
gives MORE SERVICE  
requires LESS  
SERVICING...

**SWEDEN FREEZERS**

SWEDEN FREEZER  
MANUFACTURING CO.  
SEATTLE 90, WASHINGTON

## The Perfect REFRIGERATION TUBE Deserves the Perfect Package

**Now in the famous HANDIGRIP CARTON**

Because the Handigrip Carton\* has so many proven advantages, Lewin-Mathes refrigeration tube is now available in this perfect package.

- INDIVIDUALLY PACKED
- SAFE PROTECTION FOR RESHIPMENT
- EASY TO HANDLE
- EASY TO STOCK
- EASY TO IDENTIFY

**Only Lewin-Mathes copper tube is packed in the Handigrip Carton\***

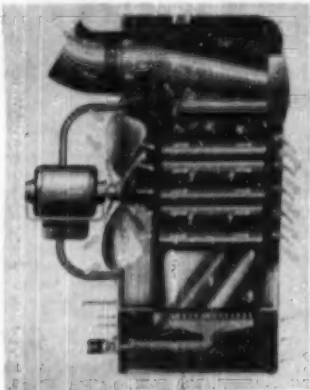
**LEWIN MATHES**

LEWIN-MATHES COMPANY • SAINT LOUIS, MISSOURI  
MANUFACTURERS OF COPPER AND BRASS TUBE, PIPE AND FITTINGS

# What's New

When requesting further information on new products, please use "Information Center" form.

## Trane Gas Heaters Use 'Boiler' Tube Design



KEY NO. B-1020

LA CROSSE, Wis. — The Trane Co. has introduced a new line of gas-fired unit heaters composed of six units ranging in capacities from 50,000 to 230,000 B.t.u. per hour input. Heart of the new design is the heat exchanger, "built like a boiler" with its horizontal steel tubes staggered to provide maximum areas of prime heat surface. Generously sized steel tubes are rolled into heavy end sheets, boiler tube style, and are fortified

with outer and inner rolled flanges. No cement or gaskets are used in the heat exchanger's locked seam construction. Air-tight operation is assured by the continuous seam welding of end plates to sides. A brush can be passed between the tubes.

The heat generator includes burner heads and mixing tubes of one-piece cast iron construction. They are engineered for efficient combustion of natural, manufactured, mixed, or liquid petroleum gas. Burners, pilot, and control valves are combined in one removable drawer-type assembly for easy maintenance.

Built-in safety controls include a high-limit switch to prevent overheating, and automatic cutoff of both pilot light and main gas supply. An integral draft diverter allows back and down drafts to by-pass the burner assembly without affecting normal operation.

The casings are functional without fancy trim. All casings are Bonderized before painting and finished in a neutral shade of brown enamel.

Curved louvers direct heated air, which accumulates at the ceiling, back down to the worker comfort zone. Optional equipment is the exclusive Trane louver fin diffuser, which provides both lateral and vertical control of the air stream. This diffuser permits adjustment of heat

circulation to changing comfort requirements, without changes in location of the heater.



## Knock-Down Box Made For Low Temp. Storage

KEY NO. B-1021

GRAND RAPIDS, Mich. — A new knock-down low temperature storage or hardening box for ice cream and other frozen products has been introduced by the Grand Rapids Cabinet Co. here.

The box is made in three reach-in models: the SKD-160 having 160 gals. or 50 1/2-cu. ft. capacity, the SKD 360 having 360 gals. or 101-cu. ft. capacity, and the SKD 520 having 520 gals. or 151 1/2-cu. ft. capacity.

It features portability, perfectly sealed joints, metal interior and exterior, heavy non-stick doors with extra heavy hardware, and galvanized iron pipe coils. The center coil has heavy iron strapping welded on to facilitate the sliding of cans or baskets on the same shelf.

## Phenolic Resin Coatings Resist Corrosion

KEY NO. B-1022

CLEVELAND — Two phenolic resin coatings specially formulated to protect equipment against extremely corrosive conditions by covering it with a tough, impervious film which is resistant to attack by corrosive acids and alkalis, salt water, rust, and weathering, have been introduced by the Ric-wil Plastic Coating & Mfg. Corp. here.

The company says the coatings are particularly adaptable to the protection of ventilating and duct systems.

One of the coatings, called "Ric-wilite 1060" is of the heat hardening type. When baked at 350 to 400° F. the coating hardens or polymerizes to form a chemically inert, insoluble, corrosion resistant coating, glass-like in appearance, yet flexible and elastic.

The other coating, "Ric-wilite 7100" is of the cold setting type which is cured or polymerized at room temperatures by the addition of a catalyst just prior to application. It can be applied to almost all metals, concrete, wood, and plaster surfaces by brush or spray.



## Drink Dispenser Contents Circulated by Tiny Pump

KEY NO. B-1024

SOMERVILLE, Mass. — Announcement of a "completely new type" of electrically-refrigerated drink dispenser has been made by Jet Spray Cooler Co. here.

Among the major features is a tiny magnet-driven pump entirely within the 3-gal. plexiglass "stratadome" bowl which continually circulates the contents around the cooling turret.

A constant thermostatically-controlled temperature of 38 to 40° is thereby maintained "from top to tap," according to the company.

No agitator paddles or clutches are necessary with this "Magna Power" drive, it was stated.

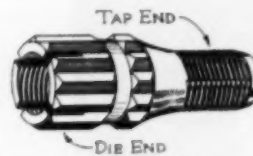
"Cleaning the new dispenser is simplified since the entire reservoir and tap is lifted off as one piece," the company said. "The liquid circulates only in this unit."

A Westinghouse "Odorout Sterilamp" protects the tap and cabinet interior.

Samuel Dane, president of the company, said the cooler's action "cascades contents over the top of the plexiglass reservoir and prevents accumulation of unattractive pulp as the content is dispensed. The new stratadome bowl remains crystal clear at all times. Its new tiny tap aerates each drink as it is served."

The dispenser unit is rubber mounted and has a plastic cabinet.

The cooler will be shown for the first time at the National Hotel Exposition, Nov. 10-14.



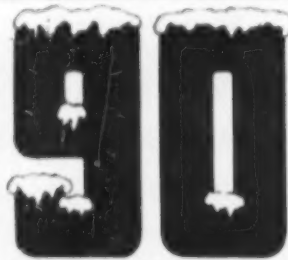
## Thread Chasers Repair Copper Fitting Threads

KEY NO. B-1023

PROVIDENCE, R. I. — For "on-the-job" repairs to damaged or crossed threads in copper fittings, new "Thread Chasers" are now offered by Smart-Tools, Inc. here. They are made in sizes to take care of all commonly used fittings. Each chaser services threads in both male and female fittings.

The new chasers are especially handy in places where there isn't room to swing a tap handle. The chasers can be turned with the fingers, pliers, or any type of wrench.

FOR THIS



BELOW COLD LABORATORY

## PERFECTION STOVE COMPANY CHOOSES DEPENDABLE BRUNNER REFRIGERATION

In the new sub-zero testing laboratory of the Perfection Stove Company — man-made temperatures can go as low as -90° F. That's cold enough to change oils and diesel fuels to near solids, and cause many peculiarities to appear in metals.

To produce these blood-chilling temperatures, three Brunner compressors (two 40 HP, one 50 HP) are installed in a two-stage system, using F-22 refrigerant. The entire system is controlled by a single recording temperature controller — at a setting of plus or minus 1 1/2° F.

The precision engineering and extreme attention to detail in the manufacture of Brunner refrigeration make Brunner the logical choice for the tough jobs — big or small. Let your Brunner representative show you why hundreds of contractors depend upon Brunner for top performance — minimum maintenance — maximum profits. Or write us — Dept. A-10-1.

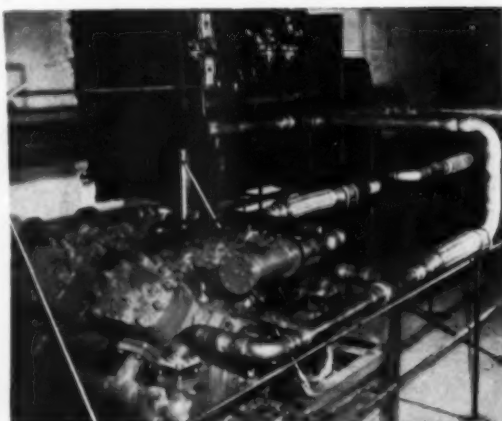
FOR THE TOUGH JOBS  
YOU CAN  
DEPEND UPON



REFRIGERATION  
AND  
AIR CONDITIONING



Cold mist rises in laboratory as technicians brave temperatures more than 100° BELOW freezing!



One of the eight-cylinder Brunner compressors on the job at the Perfection Stove Co. laboratory.

This installation of Brunner Equipment installed by Ramsey-Bennett Co., Cleveland, Ohio.

For every air conditioning or refrigeration need... Brunner condensing units from 1/2 HP to 100 HP — 65 air and water-cooled models. Self-contained Brunner packaged air conditioning units: up to 10 HP

## Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

### What's New or Current Literature Available

Key No. .... Key No. ....  
Key No. .... Key No. ....  
Key No. .... Key No. ....  
Key No. .... Key No. ....

### Products Advertised

(List name, page, and issue date)

(PLEASE PRINT PLAINLY)

Name ..... Title .....  
Company .....  
Street .....  
City ..... Zone ..... State .....  
Type of Business .....

### MAIL THIS FORM TO

AIR CONDITIONING & REFRIGERATION NEWS  
Reader Service Dept.  
450 W. FORT ST. DETROIT 26, MICHIGAN



## What's New (Cont.)

### Home Unit Pasteurizes Milk Under Pressure



KEY NO. B-1025

MELROSE PARK, Ill.—A new type of home milk and cream pasteurizer called the Safgard "Pres-Vac," model P-3000, has been introduced by the Safgard Div., Grand Sheet Metal Products Co. here.

The milk is pasteurized under pressure while the cold water cooling process creates a vacuum that holds in the flavor just as is done in vacuum packing of fruits and other foods, the company said.

Advantages claimed by the manufacturer for the new home pasteurizer are complete destruction of all disease-carrying bacteria without over-heating the body of milk and

thereby changing its flavor, faster pasteurization, better retention of natural flavors and vitamins, a better cream line, and simpler operation.

The new Safgard Pres-Vac unit pasteurizes the milk by indirect heating. The 2-gal. milk container is completely immersed in water within the unit and is held above the electric heating element. It does not rest upon the heating element and thus prevents the calcium content of the milk from being deposited on the bottom of the milk container, the company declared.

A spring tension lock holds the aluminum cover of the milk container tightly in place during pasteurization and cooling. Because of this tight seal, the milk is pasteurized under pressure. The pressure that results speeds up the heating process. The milk is constantly agitated by heat currents caused by rapid heating of the water so that pasteurization reaches every particle of the milk.

A heavy duty thermostat controls the temperature, keeping it between 155° to 159° F. The thermostat automatically shuts off the heat when pasteurization is complete and then turns on a buzzer to let the operator know the milk is ready for cooling.

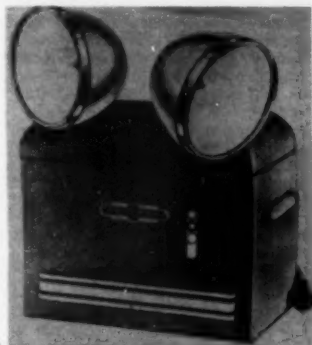
The 1,250-watt heating element operates on any 110-120-volt a.c. Since it is on less than one hour, the cost of electricity is extremely low—less than one cent per gal. of milk.

Cooling is accomplished by turning cold water into the pasteurizer. This forces out the hot water through the outlet hose near the top of the unit. The milk cools quickly and evenly, while the vacuum sealing retains the flavor and improves the cream line, the manufacturer said.

Everything in the pasteurizer is made either of aluminum or high-grade stainless steel. The milk container and its cover are of anodized aluminum. Outer surfaces of the outer container, the canopy covering the thermostat, and the top cover are finished in baked enamel. Handles are bakelite.

The Safgard Pres-Vac is guaranteed to be free from defects in materials and workmanship for one year from date of consumer's purchase. Repair or replacement during that period is free of charge.

Although the capacity is 2 gals. of milk or cream, the unit will also pasteurize smaller quantities. Model P-3000 is priced to retail at \$37.50, f.o.b. factory.



### Emergency Light Shines During Power Failure

KEY NO. B-1026

SOMERVILLE, Mass.—An automatic stand-by light with rechargeable battery that will illuminate 10,000 sq. ft. of space for four hours has been introduced by the Carpenter Mfg. Co. here.

Plugged into the normal electrical circuit, the twin-head "Watchmaster" lights will automatically go on the instant the current fails in that circuit. Thus, if plugged into a circuit serving refrigeration equipment, they will give instant warning of a power failure there, even though the general circuit is still functioning, the company noted.

Additional lamp heads or all lamp heads may be mounted away from the unit. A built-in automatic trickle charger maintains the battery charge. A built-in fast charger restores the battery after an emergency. The unit is equipped with a glass jar battery and a visible ball float hydrometer.

The battery is a special 6-volt, 80-ampere-hour type. The lamp head is 6½ in. in diameter. Over-all size of the unit is 8 by 13½ by 18 in. Weight, with battery, 60 lbs.

The Watchmaster can be furnished with conduit fitting for permanent wiring if specified. It is Underwriters' Laboratories approved.

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### Brewer-Titchener Adds 16-Tray Ice Cube Maker



KEY NO. B-1027

BINGHAMTON, N. Y.—Brewer-Titchener Corp. has announced the addition of a 16-tray, self-contained ice cube maker as a companion to its larger model.

The new unit, identified as model ICM-16, is claimed to feature "very fast freezing capacity with BTC prime surface plates, compact size, and low cost of operation."

The company said the unit will produce a complete freezing in an average of 2½ hours or 307 lbs. of cubes per day.

The ICM-16 contains 16 quick-release trays and a large-capacity, pull-out storage drawer. It is powered with a ¼-hp. Kelvinator hermetically-sealed condensing unit.

Exterior finish is silver hammer-tone. Dimensions are 26 in. wide, 22 in. deep, and 38½ in. high.



### Perimeter Air Diffuser Cuts Installation Cost

KEY NO. B-1028

WATERLOO, Iowa—A perimeter air diffuser for heating and cooling that is claimed to cut perimeter grille installation cost by more than 85% has been announced by Titus, Inc.

With the new Titus perimeter diffuser, installation is made with the back of the grille flush with the wall. Ductwork leading to the grille comes through the floor rather than through the wall itself. The diffuser merely slips over the boot.

Baffles on the inside of the diffuser throw air streams in an 180° arc, completely blanketing the outside wall with warm or cool air.

The diffusers are made with a finish coat that blends well with any furnishings and does not require additional painting, according to the company.

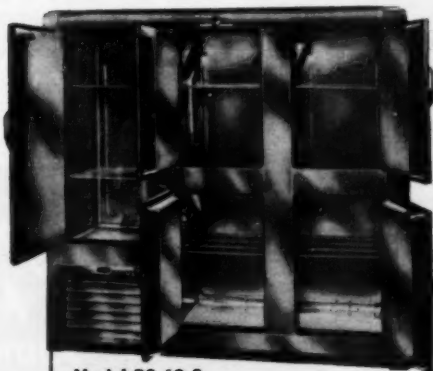
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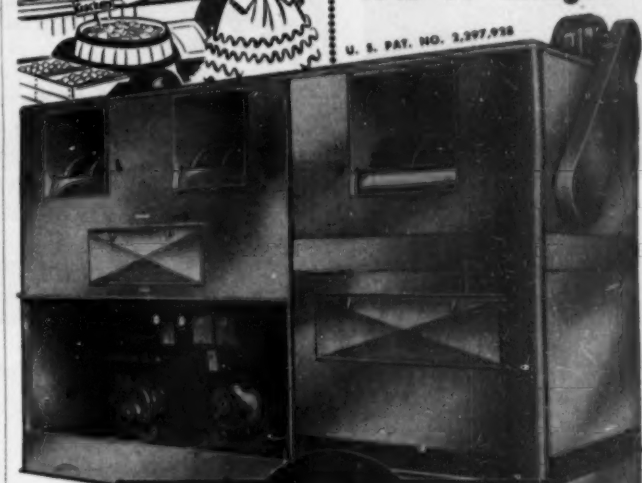
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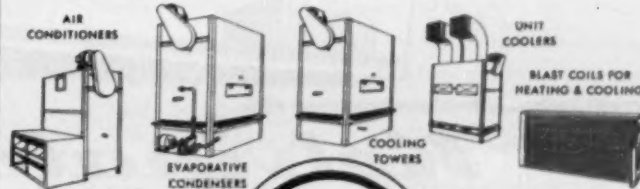


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### GOVERNNAIR

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# Servicing Ice Cream Freezers

Some Common Complaints and How To Remedy Them Are Described

By A. H. Allen of Mills Industries

HERRING, Ill.—"You and I know of the freezer owner who, because a fuse blows out, causes the seller to travel many miles to insert a 15-cent fuse," commented A. H. Allen of Mills Industries, Inc., in a discussion on servicing ice cream freezers given at the annual convention of the Illinois State RHEG association here.

"Or, the man who, after dropping something into the freezer barrel complains loud, long and bitterly over his equipment. We might further find an operator who never cleans his equipment and complains a pump will not operate. It is only dirty, and, after causing the seller to come many miles, is able to operate the freezer after the serviceman does the operator's job by just cleaning the pump.

"Some neglect to lubricate the freezer or to tighten belts, or to see that mix is correct for the freezer; or neglect to use a thermometer; or freeze too low, or neglect to generally clean and maintain fine equipment. Instruction and propaganda alone will correct these conditions. In the meantime, it costs distributors money for unnecessary service," Allen said.

Describing first the Mills "all-purpose" freezer (see Fig. 1), Allen explained that "it will handle all frozen products from 100% overrun batch ice cream, down to 18° low temperature custard, including soft ice

cream, milk shakes, frosted malted milk, ices, sherberts, and so forth. The freezer head has sufficient cross-sectional area and volume, agitator action, and air venting to quickly incorporate air to obtain 100% overrun ice cream, yet has the rugged freezer head construction and powerful agitator drive necessary for freezing and serving a stiff low temperature product.

## Sanitary Features

"With the exception of the rubber seal gasket, all of the parts coming in contact with the mix are made of stainless steel or dairy metal, with the cylinder, drive head, seal retainer, and front metal casting. The agitator assembly is constructed of dairy metal and stainless steel, with the stainless steel cross members providing strength, and dairy metal for the bearing and blade scraping that must be accomplished without damage to the mating stainless steel surface.

"The agitator seal deserves particular mention because of its sanitary features, simple construction, long life, and low cost. The seal is formed by a stationary rubber ring in which the drive head revolves. Since its incorporation into the 'all-purpose' freezer several years ago, this type of seal has been used extensively in sanitary pumps of both the piston and impeller types," Allen said.

"The drive head seal retainer and gasket may be removed with the fingers, leaving the rear of the cylinder open with no crevices to retain mix. Condensation from the rear of the freezer cylinder as well as any small amount of mix that may escape through the seal, falls into a drip tray suspended underneath the rear housing, that may be lifted off and cleaned along with the seal parts.

"If properly lubricated, the rubber ring has surprising lasting qualities and never requires adjustment as older freezers do to compensate for lateral movement of the shaft.

"The agitator drive is made up of simple V-belts and pulleys, with the speed reduced in two steps to provide adequate pulley surface to carry excessive loads without slipping. Belt adjustment of the secondary drive is made by adjusting the lock nuts on two threaded studs to raise or lower the motor and jack shaft mounting cradle.

"The motor is equipped with a belt tightener adjustment and adequately slotted motor rails. Both adjustments allow for movement of several inches to compensate for any degree of belt stretch and make it unnecessary to use steel wire or other special belts.

"A brass shear pin is provided to couple the large flywheel to the agitator shaft. This pin will shear and protect the agitator and other parts of the drive against damage due to

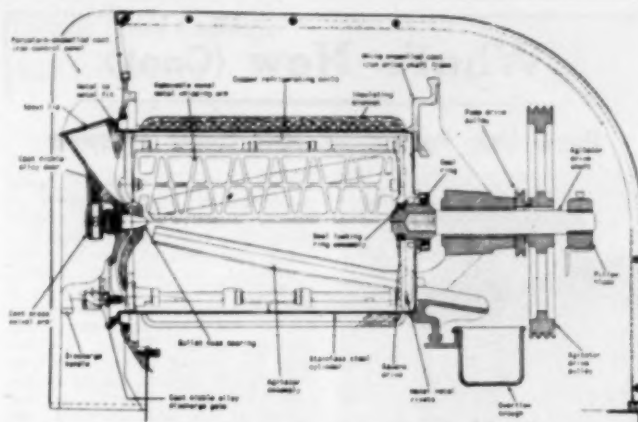


Fig. 1 shows chief elements in freezing cylinder of the Mills "all-purpose" ice cream freezer.

control failure and freezing up.

"The drive is powered by 2-hp. motor and the standard freezer is equipped with a 2-hp. water-cooled, self-contained condensing unit.

## Refrigeration Hook-Up Extremely Simple

"The refrigeration hook-up (Fig. 2) is extremely simple with the low side consisting of 50 ft. of 3/8-in. diameter soft copper tubing, wrapped tightly and soldered to the freezer cylinder and fed by a thermostatic expansion valve. The mix container or mix cabinet coils, where used, are also 3/8-in. diameter tubing hooked into the suction line from the freezer cylinder as a drier coil.

"A solenoid valve is provided in the liquid line ahead of the expansion valve for a positive refrigerant shut-off and is wired in the condensing unit motor circuit.

"Temperature is controlled by means of a close differential Cutler-Hammer thermostat, operating both condensing unit and agitator motors through two Allen-Bradley starters.

## Turning Off Agitator Turns Off Compressor

"The condensing unit motor starter coil completes its circuit through a set of contacts on the agitator motor starter, so that failure of the agitator motor will stop the compressor motor. In addition, there is a mechanical linkage between the agitator and compressor motor micro switches, so that turning off the agitator will also turn off the compressor," Allen explained.

"A special switch is provided to shut off the agitator motor when the condensing unit is used to refrigerate mix containers or cabinets over night. The agitator switch has a draw position for starting the agitator motor to expel the product when the machine is on the off cycle. The night switch is a single pole, double throw toggle switch and the agitator and compressor switches are single pole, double throw micro switches. A high pressure cut-out is provided to stop the machine in the event of water failure.

"All controls and starters are assembled in a metal box easily accessible and with a minimum of wiring.

"An opening is provided in the rear of the freezer cylinder and connected to a mix supply for automatic replenishing of the product in the cylinder.

"Hopper model freezers feed mix

by gravity through a stainless steel flow valve that may be adjusted to the capacity of the compressor or turned off. Pump model freezers draw the mix from cans located in the refrigerated side cabinet or in many installations, direct from the walk-in cooler. Pump models have a clutch for stopping the mix pump in addition to the mix flow regulating valve."

## Mechanical Failures

### Almost Nil

Allen claims that "the simple construction of the 'all-purpose' freezer has made mechanical failures practically nil, with almost any service arising from improper operation and lack of lubrication.

"I recall only a few instances of servicemen needing help: once when a broken suction reed caused a lack of capacity, and another time when a low voltage condition prevented the solenoid valve from lifting, permitting the compressor to run all night in a deep vacuum.

"As you know, a solenoid valve depends upon the hammer-like blow of its armature to bump the needle off of its seat and if it doesn't lift initially, it won't lift until the current is turned off, dropping the armature, and then turned back on again.

"Of course, the serviceman has difficulty analyzing this sort of condition because when he arrives, the operator has turned the freezer off and on again and it is operating normally and no amount of turning off and on can duplicate the failure.

## Problems Usually Not Too Well Defined

"The problems of freezer operation and mix failure are not very well known or defined by either operator or serviceman. The temperature of the mix cannot be judged by its appearance and it is absolutely necessary to use a thermometer. All the freezer can do is hold a constant temperature.

"Mixes vary considerably in their composition and processing. A low butter fat mix, proper for the all-purpose freezer, should be stiff at 20° to 22°. Mixes are made in batches at the dairy and are not always composed and processed the same. A properly informed operator, using a thermometer, can detect such changes if they cause an inferior product.

"Mixes change in the freezer, and the most common problem not gen-

(Continued on next page)



Henry Schoenfeld, President of Greenwood's, Inc., Kansas City, Missouri

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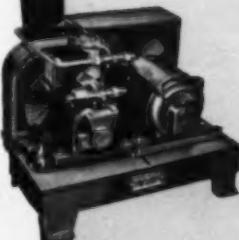
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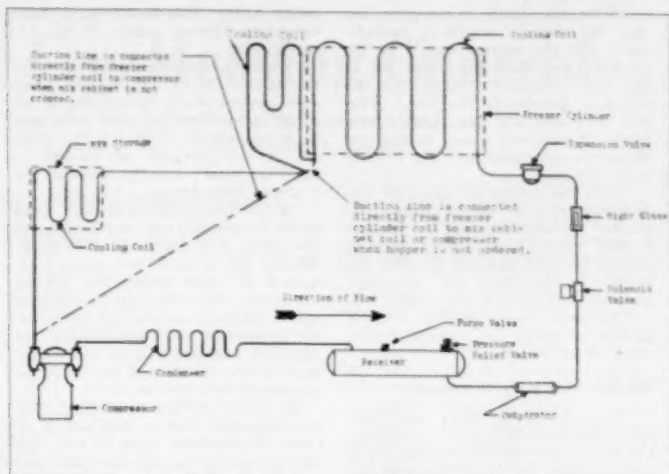


Fig. 2 is the refrigeration hookup used in the Mills "all-purpose" unit and other models.

## Servicing Ice Cream Freezers--

(Continued from preceding page)  
erally recognized by operator or serviceman, is churning (separation of the butter fat or other milk solids). This condition can be recognized by: No. 1, a grainy appearance, No. 2, a soupy consistency even at extremely low temperatures, and No. 3, an accumulation of butterfat on the agitator and door.

### Excessive Agitation Causes Churning

"Churning occurs," Allen said, "when the mix is agitated excessively, resulting either from the mix remaining in the cylinder too long, or carried for a shorter period of time at a lower temperature, a greater amount of agitation being necessary to freeze and hold the product at the lower temperature."

"The length of time that a product can be held in the freezer cylinder without churning depends on its composition and the way it was processed at the dairy, as well as the amount of agitation that it receives before being sold. Mixes with a high butter fat content churn more quickly than low butter fat mixes."

"Churning can be avoided by carrying a higher temperature and a smaller amount of mix in the freezer during the slow periods. A higher temperature setting is required because of the increased ratio of refrigerating surface to mix. Quite often this problem is not recognized by the serviceman, who sets the control colder to secure a stiffer product and in so doing, contributes to the churning."

"A light mix, too low in solids, has a high freezing point, and quite often will ice up the cylinder, causing the blades to ride over the frozen

mix. This condition is usually accompanied with, and can be recognized by, a rattling sound," Allen explained.

"Heavy mixes, too high in solids, roll into a heavy ball inside the freezer like a loaf of unbaked bread, leaving the blades scraping frost from the bare cylinder wall. This heavy product, like dough, when drawn off into cones will settle down and run over the sides of the cone. Here again, setting the control colder, has no effect on the product, and merely wears out the freezer."

"Proper mix is all-important to proper operation of the freezer and it is impossible for the serviceman to overcome difficulty with an inferior mix by making mechanical adjustments to the freezer."

"In these matters of poor machine operation, these matters of incorrect mix, all of which are important but can clearly be detected and corrected, we must not forget the operator himself, who, in spite of all instruction, will operate his freezer as he thinks fit, and in so doing disregards the best efforts of servicemen, mix manufacturers, and freezer builders to make his business sound and profitable. However, where freezers can be corrected and mix made suitable for the freezer, the operator should not be made responsible. There are excellent operators and there are some who can be classed exactly otherwise."

"Remember that a mix can be composed to give a stiff product at almost any desired temperature, within the range of the freezer capacity."

### Servicing Older Freezers

With respect to servicing older model ice cream freezers, Allen declared that there are thousands of

models using the refrigeration hookup shown in Fig. 3 still in operation.

"The freezer head is composed of two cylinders, the smaller of which is slightly longer and about 4 in. smaller in diameter and is placed eccentrically within the larger cylinder to form a greater space on top. The ends of the larger cylinder are silver soldered, forming a sealed chamber into which the liquid refrigerant is introduced at the bottom by means of a thermostatic expansion valve. The greater space at the top of the cylinder allows for active boiling and more complete evaporation of the refrigerant."

"The suction line is connected to the top of the cylinder and the vaporized refrigerant is drawn to the compressor through the freezer shut-off valve. The liquid line for the mix cabinet or for the hardening cabinet coil is connected at the bottom of the freezer cylinder, above the freezer expansion valve."

"This hookup permits the oil and refrigerant to drain out of the mixer cylinder through the hardening cabinet valve and coil back to the compressor, when the mixer is not in use."

### Check Valve In Hardening Cabinet Suction Line

"There is a check valve in the hardening cabinet suction line to keep the high pressure gas from the freezer cylinder from condensing in the hardening cabinet coil while the mixer is in use."

"To prevent damage to the freezer cylinder or expansion valve, and to control the pressure that may build up in the freezer cylinder when it is sterilized with live steam or extremely hot water, a check valve is con-

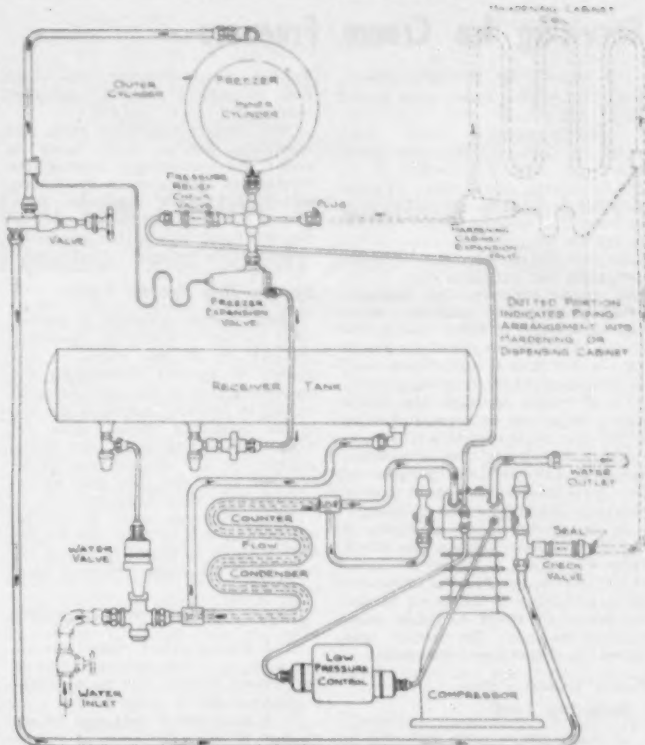


Fig. 3 diagrams the refrigeration cycle of much older Mills freezers such as models 27 and 32.

nected across the freezer expansion valve to permit any refrigerant in the freezer cylinder to back up into the high side of the system.

"There would be no purpose in

going into all the various service adjustments that could occur over the years with a system as described, however, we can discuss a few situations (Concluded on next page)

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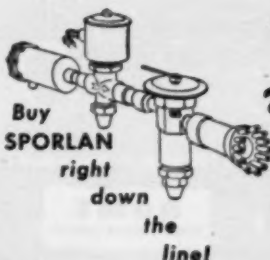
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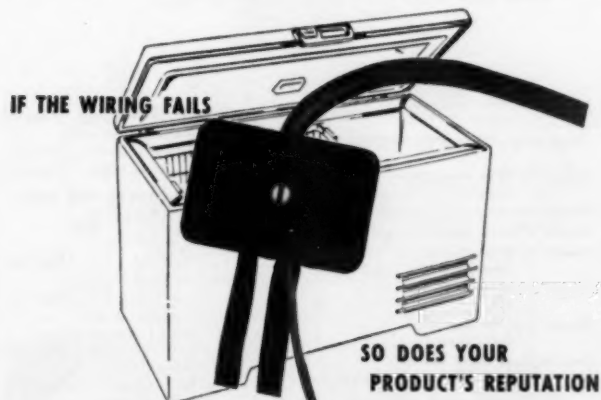
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## Servicing Ice Cream Freezers--

(Concluded from preceding page)  
tions where servicemen have needed help," Allen said.

"Leaking pressure relief check valve. A leak through this check valve will cause over-feeding of refrigerant into the freezer cylinder and any serviceman not taking time to study the hook-up would readjust or replace the expansion valve. If the leak through the check were small, increasing the expansion valve superheat would eliminate the excessive frostback but would result in a badly starved freezer cylinder throughout most of the time required for freezing the batch, and extend the overall time required for freezing greatly.

"If the leak through the check were a large one, no amount of valve adjustment could control a frostback.

"In a few cases, the serviceman failed to recognize the purpose of the check valve and removed it, with resultant damage to the cylinder.

"It is not difficult to determine if the check valve is leaking. The check valve divides the high and low sides of the system as does the expansion valve, and while freezing ice cream, one side of the check should be room temperature and the other side should be evaporator temperature.

### Warm Check Valve Indicates Leak

"A warm check valve indicates a leak," explained Allen.  
Another way to test would be to pull the compressor service switch and open the hand valve. The suction pressure rising rapidly beyond the maximum operating pressure of the expansion valve would indicate a

leaking check; however, this could also indicate a leaking expansion valve.

"The freezer expansion valve and hardening cabinet valve being in series will occasionally confuse the serviceman, particularly if he replaces the freezer expansion valve with a low temperature valve, causing the liquid line to the hardening cabinet valve to frost.

### System Has Special Valve

"This system employs a special valve having a maximum operating pressure of 25 lbs. which is low enough to prevent overloading the condensing unit on the start and high enough to prevent frosting of the line to the hardening cabinet valve. All freezer condensing units have motor pulleys for low temperature operation and the motor may stall an extremely high back pressure.

"Older freezers such as models 8-5020 and 8-2515 have the flooded type hook-up as shown in Fig. 3, except that automatic controls have been added.

"These automatic controls consist of:

"1. A Penn pressure control operating a 1/2-in. orifice solenoid valve in the freezer suction line to maintain a constant barrel temperature.

"2. A time switch that may be set to shut off after the lapse of one to 12 minutes controlling a large 1/2-in. solenoid valve also in the suction line in parallel with the small solenoid valve.

"This large solenoid valve takes the place of the hand valve, pictured in Fig. 3, but may be set to cut off

automatically after the freezing time necessary for the batch has been determined and the control is set.

"3. Automatic agitation is also provided by the same timer motor, through a cam-operated mercury switch that starts the agitator motor for 1 1/2 minutes out of every 10.

"These controls were intended to:

"1. Take over the job of freezing batch ice cream, eliminating opening and closing of the hand valve.

"2. Provide a constant barrel and product temperature.

"3. Provide automatic agitation to maintain overrun or constant weight.

"At this time, I want to point out that there are two ways of obtaining a stiff product. One way is to freeze the product down to a low temperature of 20° to 22° so that most of the water is frozen out of the mix. Another way is to freeze the mix down to a temperature at which it will readily incorporate air (24° to 25°), then shut the refrigeration off and by whipping and incorporating air, produce a stiff product similar to whipped cream.

"The first method is common for frozen custard drawn from the machine continuously. The second method is common for soft ice cream, frosted malted milk, or high butter fat frozen custard frozen in batches and dispensed from the head.

"For the second method, control of temperature is very important as a drop of 1° may destroy the ability of the mix to incorporate air, resulting in excessive agitation and ultimate churning.

"The model 8-2515 and model 8-5020 as well as the older freezers were designed for handling the higher temperature products not lower than 23° and do not have the power or drive necessary for dispensing lower temperature products. In addition, with the refrigeration and the agitation being controlled separately, too cold a temperature control setting will cause the blades to freeze to the cylinder on the off cycle, resulting in slipping of belts or damage to the agitator.

### Only Continuous Type Freezer Can Handle Low Temp.

"Only continuous type freezers can handle the lower temperature and all freezers manufactured by Mills in the past three years have been the continuous type. In addition to the problems outlined for the hook-up pictured in Fig. 3, the greatest source of difficulty with the model 8-5020 and 8-2515 freezers is misapplication, principally setting the temperature control too cold.

"The proper temperature control settings at MO 1 regulator position are 2 1/2-gal. "Freon," out 20%, in 26 1/2; 2 1/2-gal. methyl out 12 1/2 lbs., in 17 1/2; 5-gal. "Freon," out 19%, in 26 1/2; 5-gal. methyl out 11 1/2, in 17 1/2. These settings are critical only for holding overrun when packaging batch ice cream.

"Because of the pressure drop through solenoid valves and suction line, it is impossible to set the Penn regulator control cut-out point by running the compressor. The control would have to be disconnected from the freezer cylinder and set using an air pump or drum of refrigerant.

"Probably the simplest way to check the control setting is to have the operator make up a batch of soft frozen product, freezing it and whipping it to the temperature, consistency, and overrun that he wants," suggested Allen.

"When the batch is complete the way the operator wants it, immediately pull the service switch to the machine and take the cover off of the Penn regulator control. Set the regulator pointer to the No. 1 position and examine the control contacts. If they are closed, calling for additional refrigeration, the control is set too cold.

"With the control set properly, the contacts should make when the pointer is turned around to position 8 and break when the pointer is turned back to position 2, with the proper setting being the mid-point between make and break: position 5.

"The above check should be made quickly to avoid any change due to the product warming.

### 25-Lb. Valve Is Necessary

"Here again, the 25-lb. maximum operating pressure valve is necessary for the freezer cylinder. Occasionally a serviceman not thinking about the pressure control, will install a low temperature 10-lb. valve, then have difficulty with the valve not opening and the cylinder pumping out through the operation of the regulator control and solenoid valve. Of course, on any model using a solenoid valve and pressure control for holding temperature, the freezer and hardening cabinet valves cannot be in series.

"You probably will be surprised that quite often the serviceman will attempt to purge air from the system through the compressor discharge service valve port. Of course, liquid refrigerant trapping in the counterflow condenser makes it impossible to purge this type of water-cooled machine that way, unless the water supply is shut off and the compressor run to warm up the counterflow condenser.

"Incidentally, the purge valve fitting on the self-contained unit is in the side of the tank back of the

motor pulley. This fitting has a tube extending upward inside of the receiver tank.

"When hardening cabinets are connected into the system, the low pressure control is set to cut out at 17 or 18 in. vacuum. Low-side leaks can be quite difficult to find if the cabinet is not warmed up enough to build up pressure in the low side for a proper leak test.

"The common source of such leaks is the compressor seal, and sometimes the seal will take in air under vacuum but will not leak under pressure. I am sorry to say that not all servicemen are thorough enough to run a vacuum test on the compressor crankcase, and occasionally the operator will suffer with his equipment taking in air and having to be purged week after week.

"If a system has been purged of air frequently over a long period of time, it is almost positive that the leak is at the compressor seal because a leak in the low side at any other point would have taken in moisture which would interfere with the operation of the valves."

### Burning Out Mercury Switch

"Another common failure is burning out the mercury switches that operate the agitator motor. One of these switches is located in the control box for the foot pedal and the other is mounted on the freezer control. They are connected in parallel and either will turn on agitator motor.

"The difficulty occurs when the product is frozen so stiff that the motor stalls in attempting to start after an agitator off cycle where the temperature control has been set too cold. The mercury switches are rated at 20 amps, but the current pulled by a stalled motor exceeds this rating and the switches pop. This condition occurs only with older model 'master freezers' that are not equipped with starter for the agitator motor."

## How To Impress the Boys at the Office



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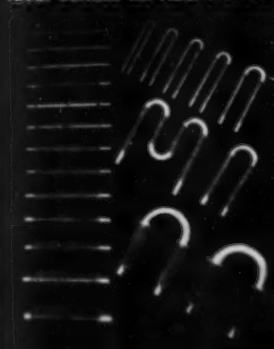
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## Gas Heating Controls

By Service Information Division,  
White-Rodgers Electric Co.

### II—How Safety Pilots Function In Plant

Safety pilots have one feature in common—they all have gas burners. The burners of pilots have two functions: (1) to light the heating plant burner, (2) to provide heat to keep the safety pilot activated.

Safety pilot temperature sensitive elements vary in construction according to different manufacturers' ideas. However, all pilot temperature sensitive elements are designed to shut off the gas supply to the main burner in the event of pilot light failure.

We are concerned with two problems from a service angle standpoint: keeping the proper flame on the pilot burner and making sure the sensitive element of the pilot is operative.

Adjustments of the settings of pilot sensitive elements must only be made when the manufacturer issues instructions covering adjustment. To undertake pilot adjustment "on your own" opens your action to criticism

in event of future pilot failure.

Gas pressure delivery to a pilot burner should be regulated to obtain maximum pilot operating efficiency. The pilot burner is supplied with an orifice to measure gas delivery. But the amount of gas delivered will vary with the pressure on the pilot line.

Gas pressures on most pilot burners should not exceed 7 in. or be less than 2½ in. of water column pressure, measured with a manometer, commonly called a U gauge.

Pressures fluctuating more than indicated above should be controlled with a pressure regulator in the gas pilot line.

Draft due to stack pull or secondary air must be carefully watched so that it does not shift the flame of the pilot burner away from the temperature sensitive element. On some jobs it may be necessary to secure a baffle to the pilot assembly that will stop draft from distorting the pilot flames.

It may be necessary to consult the gas company to determine the proper sized orifice to use in a safety pilot. The heat value, also the specific gravity and pressures, normally encountered in a given territory may require that an orifice be used that is of a different size than the one supplied by the control manufacturer.

Needle valves in a gas pilot line cannot be used to control gas pressure. The needle valve opening acts only as another fixed orifice in the gas line. Gas delivery through the valve will vary with gas line pressure changes.

Safety pilot lines should be installed upstream ahead of the main burner's manually operated shut-off valve. Never install the pilot line downstream of the main burner gas pressure regulator. When the burner lights, the drain on the gas line may cause the pressure to momentarily sag till the pressure regulator stabilizes. The gas pressure drop plus a slight positive pressure in the combustion chamber when the main burner lights may put out the pilot light.

### Appleman Art Glass Works Becomes Electriglas Corp.

BERGENFIELD, N. J.—Appleman Art Glass Works here has changed its name to Electriglas Corp., it was announced by Leon Appleman, president.

He said it was deemed desirable to change the name to one which would more accurately describe the function of the organization—the manufacture of "Electriglas" radiant heat panels.

The name change coincides with the launching of an expansion program this fall.

The company's offices were moved recently to a newly completed office building constructed on the factory property. The area previously occupied by offices is being converted into factory space.

### Honeywell Appoints Locke Sales Account Executive

MINNEAPOLIS — Richard M. Locke has been promoted by Minneapolis-Honeywell Regulator Co. to account executive in sales, it was announced by K. L. Wilson, manager of the heating controls division.

He will be in charge of sales of automatic control equipment to manufacturers in the window cooler and domestic year-round heating and cooling market.

Since November, 1950, Locke has been assistant sales manager of the wholesale division. Before that he was wholesale sales manager for the midwest region in Chicago for two years. He came to Honeywell in December, 1945, at the Milwaukee sales office.



### Gas, Coal Plentiful for Heating; PAD Sees Possible Tight Supply Situation on Oil

NEW YORK CITY—Natural gas fuel is reported in ample supply and coal in excessive supply but there is some talk of possible oil shortages this winter.

Some industry officials say speculation that oil will be in short supply is just "scare talk." However, the Petroleum Administration for Defense thinks a tight supply situation is possible, particularly in the North Atlantic states.

The PAD looks for a 17% increase in demand for distillate fuel oil this winter. This prediction is based on an increase in the number of oil burners in private homes and on the assumption that the coming winter will be colder than the last one.

While not actually forecasting a colder winter, PAD figures the nation's fuel oil needs on that basis because it considers the last four winters to have been abnormally mild. It says a "normal" winter would be about 10% colder than the 1951-52 heating season.

For these reasons, the agency has been urging the industry to boost fuel oil production. But the industry maintains that the problem is not

one of production but of storage and distribution. Planned expansion of storage facilities has been slowed down by the steel strike.

Nevertheless, many industry officials see no cause for alarm. Said a spokesman for the Oil Heat Institute:

"We've been hearing the cry of 'shortage' for the last four years. But the shortages never develop."

Others grant that an unusually warm October might change the picture. They note that this would hold present oil stocks in storage and force production cutbacks. A sudden drop in temperature would cause a sudden drain on stocks and a consequent rescheduling of production. In such an event, refiners might not be able to meet the peak load in time.

### Hospital Contract Awarded

SEATTLE, Wash.—The Veterans Administration announced that a \$100,455 contract for refrigeration equipment for a 1,000-bed V. A. hospital in Los Angeles has been awarded to Miskella Supply & Refrigeration Co. of Olympia.

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Air Conditioning  
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## Service Maintenance Contracts

**Year-Round Program Keeps Installation Crew Busy During Slack Seasons, Keeps Customers Happy During Busy Ones**

CHICAGO—"Service maintenance contracts are the one sure answer to the problem of keeping together an installation crew to handle room air conditioners," says Jim Brown of Utilities Air Conditioning Co. here.

Brown can speak with some authority on the problems in selling, installing, and servicing room air conditioners. He first started selling room air conditioners in the late 30's, and since the end of the war has concentrated on selling this type of merchandise.

While his setup is practically a "one man sales operation" as far as selling goes, he rarely fails to sell more than 100 room air conditioners a year. But for some time he was plagued by the installation and service problem.

For a time, he contracted out the work to a top-flight refrigeration contracting firm. This firm's work was satisfactory, but as Brown says:

"The problem is obvious. They're busiest just when you really need them. And delays in installation of room air conditioners makes people angry, kills sales, and results in a lot of ill-will."

Brown hired some men to set up an installation and service staff of his own, but found it difficult to hire good men from one season to the next. Finally, he decided to try selling service maintenance contracts as a way to keep a permanent crew.

He found that selling a sufficient number of such contracts to keep a crew employed on a year-round basis was not too difficult. Business and professional people, especially, seemed to recognize that there was a maintenance, start-up, filter-replacing, and clean-up problem, and that one easy way to see that such things are taken care of properly is to have a service contract. Then too, it is probable that TV service contracts have educated people to an acceptance of such a method.

Furthermore, the Chicago room air conditioner specialist found that selling service contracts was a good way to occupy his time during the late summer and fall months when there is little chance of selling room air conditioners—in Chicago, at least.

When he starts out to sell a service contract, Brown carries along a filter replacement. He makes the replacement without charge, at the same time pointing out the condition of the dirty filter, and leaving the obvious inference that such a condition needs looking after at regular intervals.

The flat fee which he charges on the service contract covers service calls made by the user and a regular start-up-of-the-season start-up and clean-up call. The contract specifies that any parts needed will be furnished at cost.

In cleaning up a conditioner before it is started up, Brown's men use a vacuum cleaner with a blower attachment. This blower is used to blow out the evaporator very thoroughly, so that no accumulated dust or dirt will be carried into the room when the unit is first started up. He says that this phase of the maintenance operation never fails to please the customer mightily.

The service contract does not include the removal and storage of the unit through the winter months. Brown will do this at the extra cost for a customer who demands that it be done, but usually tries to sell the customer off the idea.

### DISCOURAGES UNIT STORAGE

There are a couple of reasons why Brown dislikes the removal and storage practice. Main objection is that the procedure is so costly it generally disgruntles the customer, and builds ill-will for the room cooler business generally. Then too, it serves to complicate matters in the busy season late in the spring.

Brown for years has been trying to educate his prospects to buying early and getting their units installed before the rush that comes with a heat wave. It's been a long, hard struggle, but he has made some headway, and he hopes that in 1953 he will have well over half of his anticipated yearly volume sold before the first heat wave strikes.

In addition to the obvious advantage of having the equipment in operation before the first hot spell strikes, Brown has developed some other arguments that seem to carry weight.

He points out, for example, that installation practices during the rush season may be sloppy, resulting in an inefficient job that may prove costly later. Then he points out the advantages of having controlled ventilation in the late spring, a time when many people complain of drafts from open windows, and when there is a high incidence of colds and virus infections.

Brown doesn't actively seek leads from users in the "bird-dogging" sense, although he makes many of his sales from referrals. Says he on this point:

"The economic level of the people who buy room coolers, at least up to now, is such that it would be poor strategy to try to 'tip' them for the name of a person who might turn out to be a buyer."

### FOLLOW UP NETS 'REFERRALS'

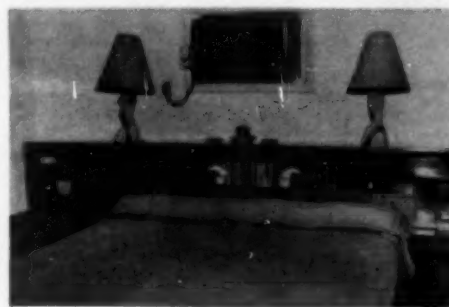
However, he makes it a point to make a follow-up call on every purchaser not too long after the installation has been made. This gives him the chance to check over the operation of the unit, and to fully instruct the user on how to control and operate the unit for maximum performance. From such calls he gets a lot of "referrals" that are Grade-A prospects.

While he has concentrated primarily on the business and professional office market, the Chicago dealer has made some sales to residential prospects. He believes that other than in a sale to a one-room apartment, the salesman has failed if he sells only one unit to a home.

"The approach is simply to say to a person who has bought a unit for a living room—

"How are you going to sleep after being in that nice comfortable atmosphere right up to your bedtime? And the argument can be reversed if the unit is bought for the bedroom."

Trade-ins are just beginning to loom up in the room air conditioner business. Brown is not particularly wary of them, has made money on those he has handled thus far, and



THROUGH-THE-WALL installation of room cooler was made in each bedroom of 24 apartments in the Skylark Apartments, Miami. An individual thermostat is installed beside each unit.

## 24 Room Air Conditioners Installed In Florida Apt.

MIAMI BEACH, Fla.—Mitchell ½-hp. window-type room air conditioners were recently installed in the bedroom of each of the 24 apartments of Skylark Apartments here.

Residents can set the thermostat located beside the air conditioner at the desired temperature. The entire unit—air conditioner and thermostat—is set in a modern frame. Installation was the through-the-wall type.

Consumers Air Conditioner Corp., Miami Beach, installed the air conditioners. Supervising was Herb Rose, Mitchell representative.

## Carrier N.Y. Distributor Signs \$1.5 Million Room Air Conditioner Order

NEW YORK CITY—The largest single order ever written by Carrier Corp. for room air conditioning units has been signed by Carleton-Stuart, Inc., Carrier distributor in New York City, the manufacturer announced.

The order, covering window-all models and console models, totals more than \$1,500,000, according to David W. Hoppock, Carrier's New York district sales manager. The order does not include requirements of Carleton-Stuart for the Carrier residential "Weathermaker" units for year-round heating and cooling of homes in the area.

George Saunders, general manager of Carleton-Stuart, stated that the order "anticipated the first requirements for the 1953 market."

"We are backing up our faith in the room air conditioner market with a firm order," Saunders said. "It really is a minimum order, as we see it today."

Saunders pointed out that all room air conditioner outlets were caught short in the 1952 market because inventories did not anticipate the extraordinarily hot summer.

## Quiet Kool To Expand Production Next Year

NEWARK, N. J.—Quiet Kool Div. of Quiet-Heat Mfg. Corp. plans to expand production considerably for 1953, "because of the demand for the Quiet Kool line of room air conditioners, including the newly-introduced 'Install-It-Yourself' ½-hp. air conditioner," Eugene M. Peters, vice president in charge of sales, stated.

The "Install-It-Yourself" room air conditioner is priced at a suggested list of \$199.75, complete with an accessory kit, and is particularly suitable for bedroom installations, the company said. It added that it has devised a "simple, five-point plan of installation, making it possible for the owner to install it in less than 30 minutes."

Peters said the company believes air conditioning "has been brought more within the means of the average consumer, and we feel certain that our new 1953 ½-hp. unit is going to be one of the leaders in the field of room air conditioners."

**What Dealers say they want to know about Room Air Conditioners**  
(Based on an impartial survey)

### Q. Where do I find prospects?

A. Everyone in your area who wants real year 'round health and living comfort is a real prospect—everyone who lives in a house or apartment—everyone who has an office.

Add to these the prospects who wish to make their services more attractive or increase their profits—doctors, dentists, hotel and motel owners, builders and industrial firms and you have unlimited prospects for Remington Room Air Conditioners.

### Q. How can I make air conditioning a year 'round business?

A. By year 'round selling of Remington Room Air Conditioners' year 'round health and comfort features—constant, controlled fresh ventilating air, filtered free from dangerous dust, dirt, pollen, gently circulated without drafts and dead spots, humidity control on damp, muggy days, noise elimination plus actual electric heating on Remington consoles.

### Q. How much do I have to invest in inventory?

A. Very little. Remington offers the industry's most complete line—a model for every need—a need for every model—yet this wide range can be demonstrated with only a few.

And there's Remington's new floor plan, part of a new manufacturer-distributor-dealer franchise you can't afford to miss.

### Q. What will the manufacturer do to help me sell?

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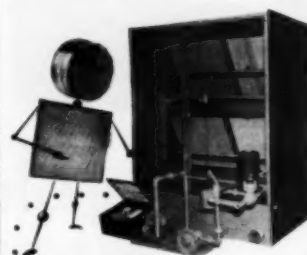
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## Back In Service

## Today's Emphasis on Jet Planes Requires More Space In Low Temp. Test Chambers

WICHITA, Kans. — The Korean war that took Navy ships out of mothballs and tanks out of cocoons also brought back into service such vital equipment as the refrigerated strato-chamber built by York for government-owned Plant II operated by Boeing Airplane Co. here.

But the plant that once thrilled the world with its B-29's is now concentrating on jets. This change also required numerous alterations to the large test chamber, points out H. O. Mehmen, sales engineer for York.

## BUILT FOR WORLD WAR II

The Boeing strato-chamber as developed by York during the early days of World War II duplicated the temperatures and pressures a giant bomber would encounter at such heights as 40,000 ft. where it must operate to perform its mission in the sub-zero temperatures and the low atmospheric pressures of the stratosphere.

Here in a 12-in. cork insulated steel cylinder were tested airplane parts, flying gear and, on occasion, personnel. Under conditions which perfectly reproduced a plane's climb rate, with man-made temperatures reaching down to -75° F. and atmospheric pressure as low as 2.7 p.s.i., was developed the B-29.

In one of the two vault-like laboratories (which made up the Boeing all weather system of test cells) measuring 17 ft. 4 in. long with a width of 11 ft. 3 in. and touching 9 ft. high and thoroughly insulated with 24 in. of granulated cork, all through the war years Boeing engineers studied the flaws and weaknesses which often accompany new aircraft design and their components when subjected to extreme temperatures. In this chamber temperatures ranged from 160° F. to -75° F., depending upon the particular test requirements.

## STRATO-CHAMBER ALSO USED

The other room was a strato-chamber which was a 9 1/2-in. steel cylindrical chamber, 7 ft. in diameter by 34 ft. over-all length and insulated with 12 in. of corkboard on the outside. It was this chamber which created both temperature and air pressures corresponding to those found at both sea level and at 40,000 ft. Although the temperature usually found at 40,000 ft. is -67° F., Boeing called for 8° lower.

Approximately 20 ft. of this chamber was refrigerated, while the remaining 14 ft. was assumed the functions of an airplane's cabin or fuselage. The entire 34-ft. structure could be evacuated to the low pressure identical to that found at 40,000 ft. But only the refrigerated section of the chamber could be cooled to -75° F. However, during a preliminary and "off the record" test -100° F. was recorded in both the cold room and the strato-chamber when

operated separately, Mehmen recalls.

A two-stage York refrigeration system involving two 60-hp. units, for the low temperature stage machines, one 75-hp. unit for the high temperature stage formed the nucleus of the system.

The increased activity in the aviation industry which came with the Korean war found the old chambers still intact, but they weren't able to meet the newest conditions required by jet bombers, according to Mehmen. The strato-chambers built for testing World War II bombers weren't completely right for testing today's fighting machines.

Temperatures lower than -67° needed to be developed, more severe weather conditions had to be simulated; larger chamber space was required because the latest bomber designs were not only larger but developed increasingly greater heat loads.

And lately test requirements have reached a point where the refrigeration equipment has to be able to operate for weeks on end without failure. Furthermore, the greatly increased speed of bombers like the B-47 jet indicated that the pull-down time of the chamber would have to be greatly reduced to approximate the new bomber's speed in rising to the stratosphere.

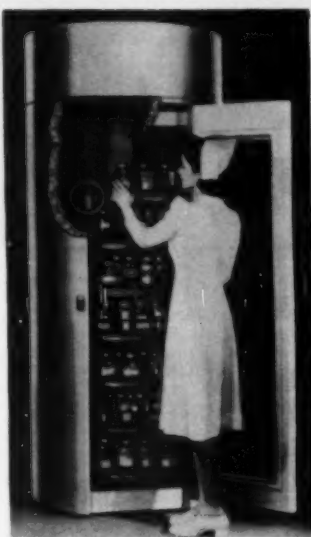
However, this latter requirement was discarded because it would have resulted in additional refrigerating machinery and time was running short. But the demand for more test space could not be neglected.

## HOW ADDITIONAL SPACE WAS OBTAINED

The solution arrived at by York engineers was to acquire the necessary additional test areas without consuming any more floor space than had been occupied by the original chamber. To achieve this, the air handling unit, formerly located in the cold room, is being relocated atop that chamber. Since the building housing the two chambers has sufficient loft for expansion, it was decided to utilize it. This move itself provided much of the additional space sought for inside the structure.

By removing the 24-in. granulated cork insulation and re-insulating the inside of this chamber with Alumi-seal, Boeing will have a cold strato-chamber with inside dimensions approximately 25 ft. 6 in. long, 14 ft. wide, and 10 ft. 4 in. high which company engineers feel will be sufficient to house any component part they want to test.

A rather new concept in controls is being installed whereby temperatures can be automatically controlled within the chamber from 160° F. to -75° F. Humidity control is likewise being adopted which will make possible a selection of humidities from 40% to 100% at any temperatures above 35° wet bulb.



ALARM bells in circuit of two thermostats (circled) ring if blood plasma temperature is too high or low.

## Alarm Bells Help Prevent Blood Plasma Spoilage

BUFFALO—A pair of "Thermoswitches," precision thermostatic units manufactured by Fenwal Inc., function as temperature "watchmen" to prevent spoilage of blood plasma stored in the Jewett Refrigerator Co.'s hospital blood bank.

An alarm bell in the thermostat circuit sounds when the internal temperature of the blood bank, nominally at 37° F., reaches either 32° F. or 48° F. — the freezing point or a higher temperature indicating probable failure of the refrigerating system. The alarm bell rings continuously until temperature of the blood bank has been brought back again within the safe range.

As shown in the illustration, the two thermostats (in the white circle) are secured to the wall of the blood bank just below the refrigeration outlet, a position affording optimum exposure to temperature change. The simple alarm circuit is designed so that 110-volt a.c. house current is supplied to the bell when the contacts of either thermostat close. The regular-type Fenwal unit is set to close when temperature drops to 32° F., while the other thermostat is the inverse type set to close at 48° F. (remains closed at higher temperatures).

Although set by locking devices at 32° F. and 48° F., respectively, the Thermoswitch models used in the blood bank may be adjusted to operate at any temperature between -100° F. and 400° F., a range covering many control requirements in the medical field.

## Overload Protector Now In Recold Coil Motors

LOS ANGELES—Another important step in product development has recently been made by the engineering department of Refrigeration Engineering, Inc. Effective immediately, fan motors on all Recold blower coils will have a built-in overload protector which will prevent motor burn-outs at no extra charge.

This change can bring a saving to users of these blower coils, both from the standpoint of service calls and replacement of burnt out motors, the company claims.

The problem of motor burn-outs on blower coils has been critical for many years, the company points out, and because this trouble can result from so many different causes such as lack of oil, mechanical abuse, or sudden excessive power loads caused by circuiting conditions, it has been difficult to find a solution.

To overcome this problem, the engineering department of Refrigeration Engineering, Inc., studied every possible cause of overloading. Motors incorporating the overload protectors, operating under different load conditions, were started and stalled continuously day in and day out for long periods of time. These tests have proved conclusively that the overload protector offers the best possible protection against burnt-out motors.

## STATEMENT OF THE OWNERSHIP, MANAGEMENT, AND CIRCULATION REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1913, AS AMENDED BY THE ACT OF MARCH 3, 1933, AND JULY 2, 1946 (Title 49, United States Code, Section 3683)

OF Air Conditioning and Refrigeration News published weekly at Detroit, Michigan for October 1, 1952.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Business News Publishing Company, 450 West Fort St., Detroit, Michigan.  
Editor, George F. Taubensee, 870 University Pl., Grosse Pointe, Mich.  
Managing editor, Phil B. Redeker, 13243 Strathmore, Detroit, Michigan.

Business manager, Edward L. Henderson, 1973 Stanley Blvd., Birmingham, Mich.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.)

Business News Publishing Company, 450 West Fort St., Detroit, Michigan.

Margaret B. Cockrell, 18900 Wildemere, Detroit, Michigan.

George F. Taubensee, 870 University Pl., Grosse Pointe, Michigan.

Edwin C. Henderson, 1973 Stanley Blvd., Birmingham, Michigan.

Phil B. Redeker, 13243 Strathmore, Detroit, Michigan.

Robert M. Price, 20 Wierman Lane, Hillsdale, New Jersey.

C. Dale Morley, 17154 Westbrook, Detroit, Michigan.

Walter J. Schuler, 5124 Seminole, Detroit, Michigan.

John O. Sweet, 3031 Ashbury Park, Detroit, Michigan.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semi-weekly, and tri-weekly newspapers only.)

18,134.

Edward L. Henderson, General Manager

of September, 1952.

Notary Public, Wayne County, Michigan  
(My commission expires May 2, 1953.)

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## Refrigeration Problems and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

### Non-Condensables In the System

In the ammonia field we often hear the term "non-condensables" used, and sometimes "foul gases." In the low pressure field we usually just refer to "air in the system," but we mean about the same thing.

Non-condensables, foul gases, air in the system, all refer to some gas or gases that, unlike the refrigerant itself, never condense into a liquid anywhere in the system, but remain as gases regardless of whether the pressure is high, as in the condenser, or the temperature is low, as in the evaporator. These gases can be condensed, but only at much higher pressures, or much lower temperatures, than are encountered in an ammonia or low-pressure system.

#### AIR IN THE SYSTEM

What are these gases that will not condense in the refrigerating system? The chief non-condensable is air. Air is responsible for almost all of the non-condensables, although there can be some others, which will be spoken of later.

How did the air get into the system? In some cases, the air did not "get in"; it was always there. At some time there was nothing but air in the system. When the equipment was built, it had air in it. In some types and sizes of equipment, the manufacturer shipped the equipment with air in it. This is true of the larger compressors, condenser, and various types of evaporators that are installed separately on the job. They have to be opened to the air to make the pipe connections, so there is no great point in the manufacturer removing the air and putting in refrigerant, for it would be purged out anyway.

This is particularly true of ammonia equipment, say, for example, a large ammonia compressor. It is shipped as a compressor, not mounted on a base or connected to a condenser. When installed, it is mounted separately from the motor, condenser, receiver, and other components of the system and connected to them by piping on the job.

#### MOISTURE IN AMMONIA SYSTEMS

Moreover, in ammonia work, a little water in the system, coming from the moisture in the air, can be tolerated. It is not desirable, but in practice it does not continue to exist as free water and it causes no freeze-ups at the expansion valves. Ammonia will absorb relatively large amounts of water which form aqua-ammonia or ammonia water that does not freeze at the expansion valves or in the evaporators. Ammonia water is a strong alkali, but

it does not attack iron, or steel. It does attack copper, brass, or other alloys containing copper, but the ammonia industry has been so accustomed, throughout the years, to having a good deal of water in their systems that they just don't use any copper or copper alloys in their systems, so they don't have to worry about a little water in the system.

With "Freon," it is quite different. "Freon" will absorb very tiny amounts of moisture, so "Freon" systems have to be "bone-dry." Methyl chloride and sulphur dioxide absorb relatively much more water than "Freon." Moreover, with either of them, water forms strong acids that attack and corrode iron, steel, copper, brass, and practically any of the common metals (also gaskets, etc.) of which the equipment is made.

So manufacturers of equipment for these low pressure refrigerants take care to pump the air out after they assemble the parts, and put in enough refrigerant as a "holding charge" to keep the equipment dry. Instead of refrigerant, some manufacturers put in enough dry nitrogen to keep a pressure of above atmospheric and thus keep out damp air.

Nevertheless, most of the equipment, except the self-contained, completely assembled and charged systems, whether for ammonia, "Freon," methyl chloride, or any other refrigerant, has to be opened to some degree at least, when it is installed on the job. Some complete condensing units can be installed without opening them at all, but most evaporators and remote condensers have to be opened when making connections.

In any case, the piping or tubing run on the job has to be opened, so it has air in it. Thus, after all the lines are run and the joints all made there is a lot of air in the "remote" type system. If it is not removed before the refrigerant is put in, this air becomes a "non-condensable" in the system.

#### NON-CONDENSABLES FROM PRESSURE AND LEAK TESTING

Codes usually require a pressure test of from 100 lbs. or so per sq. in. up to several hundred, depending upon what refrigerant is used and the part of the system to be pressure tested.

These test pressures are higher than the normal pressures of the refrigerant itself, so some other gas is used to create the high test pressure. Compressed air can be used, and sometimes is used. But ordinary compressed air is "wet"; it has a great deal of water in it. Compressed air can be dried, but this is impractical out on the job, so some other high pressure gas that is dry is preferable, and is used by careful installation men instead of compressed air. They find that it doesn't pay to use ordinary compressed air; that it causes too much trouble to dry out the system afterward.

#### CARBON DIOXIDE AS A NON-CONDENSABLE

One of the most commonly used high pressure gases for creating test pressures, is carbon dioxide. It is

available in portable cylinders that can be easily taken out to the job. Carbon dioxide is actually one of the refrigerants. It is not used as a refrigerant much in late years; chiefly because it requires rather high pressures to condense it at ordinary air or water temperatures, and these high pressures require very heavy construction of the equipment.

In the cylinders, carbon dioxide exists as a liquid with saturated vapor above it, just as "Freon" and the other refrigerants, but the pressure is 732.7 p.s.i.g. at 60° F., 837.8 p.s.i.g. at 70° F., 954.6 p.s.i.g. at 80° F., etc., up to its "critical temperature" of 87.8° F. Above 87.8° F., it is not in a true liquid form, but its pressure is above the temperature it had at 87.8° F.

Pressure of carbon dioxide (often called by its chemical symbol CO<sub>2</sub>), is too high for most equipment; it might damage the equipment. So a pressure reducing valve must be used to keep the outlet pressure from the CO<sub>2</sub> cylinder down to 100, 150, 200, etc., p.s.i.g., required for the pressure test.

Carbon dioxide is an "inert" gas to most materials; that is, it does not affect them chemically. This is true of the common metals, oils, and even the refrigerants, "Freon," methyl chloride, and similar refrigerants.

However, it is not true of ammonia. CO<sub>2</sub> does unite with ammonia to form ammonium carbonate, a black, heavy sludge. If carbon dioxide is used for testing ammonia equipment, it should be kept out of contact with the ammonia itself, and the carbon dioxide must be entirely pumped out and down to a deep vacuum, before the ammonia is put into the system.

Carbon dioxide comes in two grades, the ordinary commercial grade and the "dry" grade. Only the "dry" grade should be used for testing refrigerating systems.

If the dry grade is not available, the commercial grade can be dried acceptably for ordinary pressure test-use by inverting a full cylinder of the CO<sub>2</sub> liquid and letting it stand in that position overnight. Water is heavier than the CO<sub>2</sub> liquid, so during the night it will settle to the bottom (really the top or valve end of the cylinder). In the morning, slightly crack the valve and drain off the water. Do this again every two or three hours during the day.

By night, you will have removed most of the water from the CO<sub>2</sub>, and it will be dry enough for test purposes.

(To Be Continued)

### Lancaster In Worthington Engineering Div. Post

HARRISON, N. J. — Appointment of John E. Lancaster as assistant chief engineer of Worthington Corp.'s Air Conditioning and Refrigeration Engineering Div. has been announced by H. A. Feldbush, vice president in charge of engineering.

Lancaster joined Worthington in 1940 as a test assistant in the experimental test department. Since then he has served successively in the research and development department as a test engineer, group leader, assistant manager, and finally acting manager.

For one year he worked on the start-up, modification, and test of GUR centrifugal refrigeration compressors at Shell Chemical Corp., Deer Park, Texas. He was graduated with a B. S. degree from Maryville college, Maryville, Tenn., in 1938 and from New York university in 1946 with a B. S. degree in mechanical engineering.

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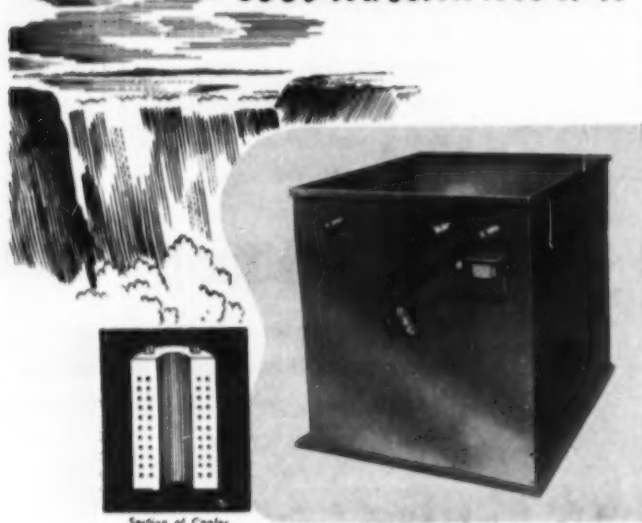
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One just can't be blind to the fact that Ranco controls are the most widely used in the refrigeration industry. And the reason is simple: dependable, accurate Ranco controls are available for more than 4,000 replacement installations—for domestic refrigerators, milk coolers, water coolers and commercial units of every type. They're the first choice of expert refrigeration men everywhere.

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COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS





## Gibson Line--

(Concluded from Page 1, Column 4) elements and removable oven bottoms.

Highlighting the freezer line is an 11.07-cu. ft. model (HFU-110) carrying the suggested retail price of \$359.95. Other freezers for 1953 and their recommended list prices are:

HF-100, 10 cu. ft., \$399.95; 14-cu. ft. model HF-140, \$459.95; 20-cu. ft., two-compartment model HF-200, \$599.95; model HFU-180, 18 cu. ft., \$599.95; model HFU-250, 25 cu. ft., \$699.95; and model HFU-320, 32 cu. ft., \$899.95.

Suggested prices of the air conditioners, called the "Tripletts," are \$229.95 for the 1/2-hp. model, \$319.95 for the 3/4-ton unit, and \$379.95 for the 1-hp. model, it was reported. A night operating switch on the latter unit enables the user to reduce motor power during cooler evening hours.

A 3/4-hp. unit designed for use with 220-volt current will be offered at \$399.95, it was said.

### REFRIGERATOR MODELS LISTED

Models and recommended list prices in the new refrigerator line are:

GCA-1193, \$419.95; GA-1193, \$399.95; and G-1183, \$359.95; all with "Swing-out Servers"; GCA-973, \$379.95; GA-973, \$349.95; all with Defrost-Matic; and G-953, \$299.95; G-933, \$249.95; with full-width "Freezer Lockers"; and the smaller 7-cu. ft. refrigerators, G-743, \$249.95; G-713 and G-703, for which there were no list prices available.

The refrigerator line also includes a two-door model, TA-1053. A price tag of \$499.95 has been put on this model.

Models and suggested list prices of the 1953 ranges are:

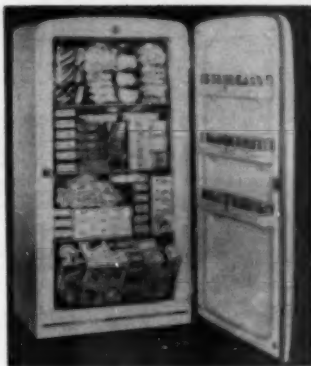
Model H, \$439.95; model G, \$359.95; model J, \$299.95; model E, \$299.95; model D, \$269.95. There are also two apartment-size models and a "low-priced leader" on which list prices are not available.

J. L. Johnson, vice president in charge of Gibson sales, said prices of the 1953 lines are competitive with those for the 1952 lines and in some cases lower, in spite of increasing production costs and an industry tendency toward raising prices.

### 11-CU. FT. UPRIGHT FREEZER CAN HOLD 400 LBS.

The 11.07-cu. ft. "kitchen-size" upright freezer has a storage capacity of 400 lbs. It is provided with five refrigerated surfaces and a special lower-compartment "tilt-out take-out" basket which can be lifted to the kitchen work space.

Other features include new "Stay-packet" shelves that tilt back to prevent packages of food from sliding forward when stacked, eye-level door



KITCHEN-SIZE upright freezer has 11-cu. ft. capacity.

racks that hold almost half a case of frozen juices, and the same deluxe hardware as found in Gibson's large-size refrigerators.

All models of the air conditioners have a 1-in. filter and the intake on the front and discharge on the top to eliminate direct air blast. For directed circulation, twin top discharge grilles which turn on 360° are used.

### GALVANIZED STEEL FOR EXPOSED PARTS

All models are designed to perform every function of cooling, drying, filtering, circulating, and ventilating. The manufacturer is using galvanized steel 100% for parts exposed to moisture, it was pointed out.

The 3/4-hp. model is for rooms up to 475 sq. ft. It removes up to 2 1/2 pints of moisture every hour, according to the company. Two panels at the top of the unit conceal the controls.

The cabinet is finished in "Baffin Beige." Thirty inches deep, it is 26 1/2 in. wide, 16 1/2 in. high, and projects into the room a little over a foot.

Gibson offers a five-year protection plan on the hermetically-sealed system and a one-year protection on other parts with the exception of the filter.

The 1/2-hp. conditioner is for rooms up to 350 sq. ft. and the 1/4-hp. unit for rooms up to 250 sq. ft.

New styling, including the cameo cream interior color scheme, has been added to the 1953 model GCA-1193 refrigerator. Swing-out Servers are major items in the new model.

A "Freezer Locker" holds 53 lbs. of frozen foods. The "Swing'r Meat Locker" is transparent and lifts out for convenience.

Two "Swing'r Crispers" for fruit and vegetables have top seal to maintain proper moisture. The two compartments lift out.

SWING'R SHELF HOLDS 45 LBS.

Small dishes, jars, and cans fit on the new Swing'r Shelf, which holds 45 lbs. and "swings in and out at a touch." "Butt'ry" and door racks hold butter, jars, and bottles at eye-level.

Gibson's Defrost-Matic, also found on other models, is part of the new GCA-1193. It is a self-starting, self-regulating, and self-stopping device.

Other features of the model are ice trays with capacity for 54 cubes; Gibson special insulation, "jet packed"; a snap-seal door latch; interior light; and nearly 17 sq. ft. of shelf area.

The 10-cu. ft. model TA-1053, a refrigerator-freezer combination, has a freezer with full-width capacity for 73 1/2 lbs. of frozen foods. An added door rack on the freezer door is a new feature in the 1953 model.

Also incorporated in this model are the Defrost-Matic feature, two Swing'r Crisps, Butt'ry and Door Racks, and a new upper door rack for frozen juice storage. Separate controls are provided for freezer and refrigerator.

Other features include an interior light, finger-tip ice trays, one "Jiffy Cube" ice tray, capacity for 52 cubes or 6.5 lbs. of ice cubes; glass "Spill-Saver" shelf, one adjustable full-



ROOM COOLER cabinets come in "Baffin Beige." Units have 1-in. filter and intake on the front.

width shelf, and three regular full-width shelves. The operating mechanism features the "Scotch Yoke" with a 1/4-hp. motor.

### OVEN BOTTOM IS REMOVABLE

Gibson has added the Do-All ovens in all its new model ranges. The "ConSealed" oven unit has a removable oven bottom to allow easy cleaning.

Other range features include a special green light for the "Magic Ups-A-Daisy" unit, new hardware with the Gibson crest in gold, new gold trim on the switch panel, fluorescent light and back splash, and a precision stop watchman timer.

Model H comes with two Do-All ovens—a "banquet" size that reportedly bakes a complete meal for 12 at one time, and a "convenience" size for baking of small meals and casserole dishes. It has 7-speed push-button cooking.

Five-way cooking is possible through a clock and timer and a selector switch which permits timing of either oven, the six-quart "Kook-all," fourth surface unit, or appliance outlet. Two 2,100-watt cooking units are features of model H.

A surface cooking unit has been added to Gibson's models D and J to give four units.

### DEMONSTRATE THE DIFFERENCE PLAN

During the two-day convention, speakers referred to the 1953 Gibson sales theme of "Demonstrate the Difference."

It was reported that the company's 1953 advertising and sales promotion activities will include a comprehensive national advertising campaign in both consumer and trade media. Among consumer magazines to be used are *McCall's*, *Good Housekeeping*, *Better Homes & Gardens*, *Country Gentleman*, and *Life*, according to G. V. Drumm, advertising and sales promotion manager.

Also covered was Gibson's training and promotion plans to be carried on by distributor to dealer, as well as plans for incentive programs to be launched nationally soon after the first of the year.

Distributor personnel were told that the new line will be introduced with a giveaway promotion under which purchasers of a 1953 Gibson appliance will get a musical jewel box filled with costume jewelry.



### for Good Looks

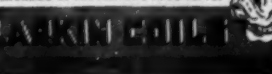


### LARKIN HUMI-TEMP UNIT

For clean, smart lines, satin-smooth finish, color and overall good looks—Larkin leads. Behind this beauty is the quality and performance that keeps Larkin ahead.

Manufacturers of the original Cross-Fin Coil — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Coils — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.

WATERCOOL OF THE NATION'S FOOD SUPPLY



SWING OUT servers are feature of Gibson's new GCA-1193 refrigerator.

### OPS Permits Adjustment For Higher Freight Cost

WASHINGTON, D. C.—Manufacturers operating under the General Ceiling Price Regulation, Ceiling Price Regulation 22, or CPR 30 who sell on a delivered price basis may now increase their ceiling prices to reflect higher outbound freight costs, the Office of Price Stabilization announced recently.

Procedures for making the adjustments are contained in SR 122 to the GCPR, SR 35 to CPR 22, and SR 9 to CPR 30.

The costs noted in these actions are those resulting from rate increases authorized by statute or by any Federal or state regulatory agency.

They include freight rate increases in the rates of contract carriers as have been permitted previously by OPS.

### Copper Supply Uncertain For Next Six Months

WASHINGTON, D. C.—Uncertainty exists about the over-all situation in the supply of copper in the fourth quarter of 1952 and first quarter 1953, the Brass Mill Industry Advisory Committee was told recently by officials of the National Production Authority.

Factors contributing to this uncertainty, NPA said, include: (1) extent of stockpiling activities; (2) taking up of the accumulated stock of copper in Chile; (3) labor situation among domestic producers, and (4) varied prices which exist in the domestic copper market.

Any apparent easing of the copper supply situation in recent months, NPA said, is the result of (1) the steel strike, (2) adjustments in inventories, and (3) some improvement in the foreign supply situation.

Military requirements for brass mill products have reached a temporary "plateau" and little change is likely during the next two quarters, NPA told the committee.

Brass mill shipments show some increase, NPA said, and it was reported that allotments of brass might be somewhat higher in the fourth quarter 1952 than in the third quarter, and that the first quarter 1953 would be about the same as in the third quarter.

### Patterson Handles Gibson Line

NEW ORLEANS—Appointment of C. T. Patterson Co., Inc., 800 N. Peters, as local distributor of Gibson appliances, has just been announced here. R. L. Simpson is president.



### Reach-in Refrigerators In Your Territory!

America's leading commercial refrigeration dealers are turning to the world-famous KOCH line of REACH-IN REFRIGERATORS at a rapid rate. Here's why you, too, will want to take on this profitable dealership.

### IT'S WIDE OPEN

—the MARKET for KOCH Reach-Ins! Every establishment in America where large quantities of food are kept is a potential KOCH customer. And these customers are pre-sold on KOCH as a leader in the field for 70 years.

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The KOCH reach-in line includes self-contained and remote type cabinets for nearly every commercial application. Nearly all models are manufactured with porcelain finish. Many options available.

### CHECK THESE ADVANTAGES:

- All Porcelain Inside and Out
- 5-year Warranty on Motor Compressor
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Don't Lose Another Minute or Another Dollar! Get the NEW DEALER Proposition Today!



MODEL 2845 (45-cu. ft.) for remote hook-up to the condensing unit.

**KOCH**

refrigerators, inc.  
NORTH KANSAS CITY 16, MO.

### "ADDIT 88"

(A Special Formula For Refrigeration)  
"The First Oil Additive in the History of Refrigeration"  
"ADDIT 88" will produce results in your refrigeration system that will amaze you.  
Attention Manufacturers of Refrigeration Compressors! Send for information on This Amazing Discovery

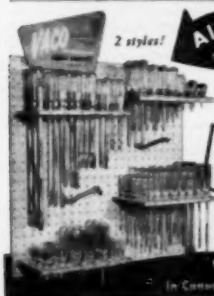
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In Canada: Vaco-Lynn Products Co. Ltd., 204 Lorne Ave. W., Montreal 8, Que.



# PATENTS

Week of August 26

**1,507,000. REFRIGERATOR GASKET AND SEAL.** Howard G. Buck, Wabash, Ind., assignor to The General Tire and Rubber Co., Akron, Ohio, a corporation of Ohio. Application April 15, 1950. Serial No. 155,561. 5 Claims. (Cl. 20-42.)



1. The combination of (1) a mounting portion for joining panel edges which mounting portion comprises a linear body of rubberlike material of uniform cross-section with opposing grooves therein to receive panel edges, a longitudinal opening intermediate the grooves and generally to one side of a longitudinal plane passing through the base portions of said grooves and a plug element integrally connected to said body along one edge of said longitudinal opening and proportioned for insertion into said opening to thereby expand the body of the mounting into tight gripping engagement with the panel edges and (2) a hollow bulbous sealing portion integral with said plug element and extending outwardly from the mounting body with a longitudinal web portion therein.

**1,506,000. REFRIGERATION APPARATUS FOR MOTOR VEHICLES.** Henry O. Kirkpatrick, Detroit, Mich., assignor to Goldmobile Co., Detroit, Mich., a corporation of Michigan. Application Oct. 4, 1950. Serial No. 119,488. 7 Claims. (Cl. 20-4.)

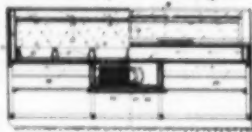
1. A refrigerating apparatus for a motor vehicle of the type having a refrigerating compartment comprising an al-

ternator arranged to be driven by the engine of the vehicle, a rectifier connected with the output side of said alternator, a refrigerating apparatus on said vehicle, a



direct current motor for operating said refrigerating apparatus, said motor being connected with said rectifier for operation by said alternator, a first battery connected with said rectifier and said refrigerating apparatus motor, said vehicle including an ignition and a lighting circuit connected with said rectifier, and a second battery connected with said rectifier and said ignition and lighting circuit, said batteries each being arranged to be charged by the current supplied by said alternator.

**1,506,000. COUNTER REFRIGERATION.** Martin Emanuel Rydin, Stockholm, Sweden. Application Oct. 5, 1950. Serial No. 119,570. 13 Claims. (Cl. 20-25.3.)



1. In combination in a refrigerating counter, a tray-like counter plate having upwardly extending front and rear sides and upwardly extending lateral end portions, said rear side being provided with a row of substantially upwardly directed air outlets, a hood having a front side extending from the front side of said counter plate upwardly and rearwardly so as to form a show case closed at its front and at the top thereof, while being open at least over the larger portion of its rear, a cooling fan underneath the bottom of said counter plate, cooling means likewise arranged underneath said bottom of said counter plate and adapted to cool air propelled by said fan, conduit means effecting communication between the air space surrounding said cooling means and said air outlets, guiding means adjacent said air outlets for guiding the air passing through said air outlets at a predetermined angle towards the upper portion of said hood, and duct means arranged at the upper portion of said hood and communicating with the interior of the hood and with the suction side of said cooling fan.

**1,506,000. FREEZING APPARATUS.** Pasquale Amorin, Washburn Heights, N. J. Application March 9, 1950. Serial No. 148,697. 1 Claim. (Cl. 20-114.)



In a freezing apparatus, the combination of a housing, a plurality of hollow plates provided with inlet and outlet ports for receiving a fluid refrigerant and arranged in superimposed relation, a vertical duct extending downwardly through the housing for supplying the fluid refrigerant and terminating in a horizontal section provided with a bleed valve at its outer end, a plurality of vertical ducts of progressively increasing lengths leading upwardly from said horizontal section, and flexible ducts of progressively increasing lengths connecting the upper ends of the vertical ducts with the inlet ports disposed at the rear of said plates, a vertical return duct, progressively increasing lengths of flexible ducts connecting said outlet ports with said return duct disposed at one side of said plates, the lower plate being fixed and the upper plate being movable toward and away from the lower plate, and means comprising headed bolts for suspending each adjoining pair of movable plates successively



## PROCUREMENT INFORMATION

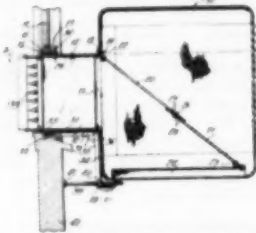
The following is a list of proposed procurements issued by the various industrial U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation in this Synopsis and the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid is made.

### DEPARTMENT OF DEFENSE

Description	Quantity	Invitation No.	Opening Date
Galveston District, Corps of Engineers, 606 Santa Fe Building, Galveston, Texas			
Contr. of refrigerated wharf & secure storage bldg., New Orleans, La. The work to consist of the contr. of two bldgs. as follows: refrigerated wharf, one story wood frame bldg., reinforced conc. floor area approx. 4,000 sq. ft., secure storage bldg., one story masonry bldg., air conditioned, 2,278 sq. ft. additional work will include 50 lin. ft. of open drainage ditch, approx. 257 sq. yds. of asphalt paving, 150 lin. ft. of 12 inch corrugated culvert and the relocation of 1,400 lin. ft. of existing water pipe.	Job	(ENG 41- 243-53-26B)	12 Nov 52
Contr. of refrigerated wharf & secure storage bldg., Lake Charles AFB, La. RCS-DD-MB-294 (R1)	Job	(ENG 41- 243-53-26B)	15 Nov 52

from the upper plate, the bolts being slidable relative to the plates to permit the movable plates to assume contact with articles placed between the plates.

**1,506,148. SUPPORTING ASSEMBLY FOR WINDOW COOLERS.** Eli Shapiro, Dallas, Tex., assignor to Dearborn Store Co., Dallas, Tex. Application Feb. 17, 1950. Serial No. 144,891. 3 Claims. (Cl. 20-94.)



1. In a window cooler and housing, a supporting fabrication therefore including in combination with a window, a duct effecting communication between said housing and window, an upper support assembly comprising a plate overlying said duct having a flanged inner end affixed to the lower sash frame of said window and whose outer end is affixed to said housing, a lower support assembly comprising a plate underlying said duct and attached at its inner end to the sill of said window, said plate being formed with a vertical portion lying against the front of said housing below said duct, a channel formed in the lower end of said vertical portion and disposed under the forward edge of said housing, a pair of angular supporting strap assemblies with- in said housing, each connected at its upper end to said upper support assembly and at its lower end to a lower outer corner of said housing, means to effect length adjustment of said strap assemblies and adjustable compression means retained in said channel for supporting said housing from the wall of a building under said window.

**1,506,330. COOLING TOWER.** Tracy S. Park, Sr., and Tracy S. Park, Jr., Houston, Texas. Application Oct. 12, 1950. Serial No. 55,204. 11 Claims. (Cl. 20-111.)



1. A mechanical draft water cooling structure, comprising a duct section, a plurality of vertical partitions in said film sections, spaced from each other, the upper end of each partition having a wall section converging toward the adjoining partition to form longitudinally extending passageways for passage of air and water extending over the width of said partitions at the top of said partitions and positioned between adjacent partitions, an air inlet plenum connected to said film section at one side edge of said partitions, an air outlet to said film section at the other side edge of said partitions, a spray chamber positioned on top of said film section above said passageways and connected to the spaces between the partitions, spray nozzles in said spray chamber positioned above said passageways, and an air discharge from said spray chamber.

(To Be Continued)

## PARTS JOBBERS

Servicemen can pick up Motors and ADAPTERS of your counter and carry them in their cars; service completed in one call, a distinct advantage. ADAPTERS also help you sell 1 to 3 hp.—103-C allied items: Motors, Belts, Pulleys, etc. Engineering Research Associates, Inc. 3475 East Nine-Mile Road Hazel Park, Michigan



# Government Contracts

Wright Air Development Center, Purchasing & Contracting Branch, Wright-Patterson Air Force Base, Ohio  
Cabinet, test temperature and vacuum, Example of: B-507  
type L-10-KV or equal

GENERAL SERVICES ADMINISTRATION			
General Services Administration, Region 3, Washington, D. C.	2 ea.	4H-1927-R	10-30-52
Soda fountains			
Business Service Center, General Services Administration, Region 5, 319 South Clark St., Chicago, Illinois	Job	CH-58376	10-30-52
Air Conditioning Unit for U. S. Public Health Service Hospital, Lexington, Ky.			
Business Service Center, General Services Administration, Atlanta, Georgia	Job	CR 4-263	10-27-52
Repairs to air conditioning systems, U. S. Post Office and Court House, Jacksonville, Florida			
Business Service Center, Region 6, General Services Administration, 1800 Federal Office Bldg., Kansas City 6, Missouri	Job	CR 787	10-16-52
Temperature indicating system repairs, Kansas City, Mo. P.O.			

## CONTRACTS AWARDED THROUGH OCT. 6

Armed Services Medical Procurement Agency, 84 Sands St., Brooklyn 1, New York  
Refrigerator, mechanical.—100, \$42,300.—Bar-Ray Products, Inc., 209 23rd St., Brooklyn 32, N. Y.  
General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pennsylvania  
Ovens: Electric Baking, Roasting.—40 ea. \$50,129.—General Electric Co., Hotpoint Co., "A" Div., 222 S. Seelye Ave., Chicago 12, Illinois

# CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

## POSITIONS WANTED

MANUFACTURER CONNECTION preferred—15 years experience in sales, service of appliances, commercial refrigeration and packaged air conditioning. 12 years' experience in hiring and training salesmen, service men and organizing distributors. Making change immediately. Write BOX 4115, Air Conditioning & Refrigeration News.

ASSISTANT SERVICE manager of manufacturer of commercial refrigeration and air conditioning with world-wide distribution desires to consider a change. Experience includes factory and field engineering, production control, procurement and expediting, the organization and operation of distributor service departments, and the management of a completely separate home office service department. For further information address BOX 4116, Air Conditioning & Refrigeration News.

## POSITIONS AVAILABLE

SERVICEMEN: EXPERIENCED, commercial refrigeration and air conditioning, to service equipment in northern New Jersey super markets, permanent employment, good salary and excellent working conditions. Give experience, references, etc. when answering. AMERICAN STORES COMPANY, BOX 305, Pinebrook, New Jersey.

MAJOR MANUFACTURER with district sales office in Oklahoma City, requires the services of a sales manager qualified to assume responsibility of district operations. Must have some knowledge of mechanical refrigeration. Please state your qualifications in your first letter, with a picture if possible. All replies will be held in strict confidence until such time as an interview can be arranged. BOX 4094, Air Conditioning & Refrigeration News.

SALES ENGINEERS. Leading manufacturer of air conditioning, refrigeration and heating equipment has openings for two sales engineers. Areas: New York City, Philadelphia. Send resume covering exp. education, exp. references. Our present sales engineers know of this ad. BOX 4108, Air Conditioning & Refrigeration News.

SERVICE MANAGER for fast growing well established air conditioning and refrigeration organization in Columbia, South America. Prefer single man with knowledge of Spanish and some application engineering experience. Write giving full qualifications, work history and expected salary to BOX 4109, Air Conditioning & Refrigeration News.

WANTED—MANUFACTURER'S Representative. National manufacturer of a complete line of air conditioning and heating equipment has several lucrative territories open. Write only, giving experience, present lines carried and territories covered. BOX 4110, Air Conditioning & Refrigeration News.

GENERAL FOREMAN—Sheet metal. Require experienced man capable managing Metal Fabrication Department approximately 75 men. Location southern Virginia. Strong background department management and complete knowledge machine set-up, sheet metal production and assembly operations. Medium size company growing fast offers real opportunity. Send resume with recent earnings first letter. Replies confidential. BOX 4112, Air Conditioning & Refrigeration News.

SERVICEMAN: EXPERIENCED, commercial refrigeration and air conditioning wanted by well established Frigidaire dealer in southwestern Ohio town of over 68,000 population. Permanent employment, good salary, excellent working conditions. Give experience, references, etc. when answering. BOX 4114, Air Conditioning & Refrigeration News.

## EQUIPMENT FOR SALE

NEW—1/2 and 1/4-hp. open type refrigerating units, air cooled. Price: 1/4 hp.—\$84.24; 1/2 hp.—\$102.60. These units are equipped with Chiffon compressor bodies and Century capacitor type motors with built-in thermal protection. Freight allowed on quantity orders of 10 units or more, may be assorted sizes. Write for literature and specifications. ARCTIC-AIRE, 1621 Grand Ave., Kansas City, Mo.

REFRIGERATOR DOORS. 3/4" or 5/8" double batten auto close doors complete with removable track heads for a 7-7/8" track. 1 1/2" corkboard insulation. 16 gauge metal clad. Brand new. \$95.00 each. Refrigerator in U. S. Door height will be altered for anything up to 11 ft. 2 in. track for \$15.00 additional. BIMEI CO., Cincinnati, Ohio.

BRAND NEW 1952 frozen food merchandiser original crates. Model FDS18A, 18 cu. ft. thermopane doors; ultra modern superstructure; Kelvinator unit, 6-year warranty. Factory list \$735.50, your cost \$371.00. Order immediately; send for illustrations. MANN REFRIGERATION SUPPLY CO., 440 Lafayette Street, New York 3, N. Y.

FEW HUNDRED 1950, 6 cu. ft. used household refrigerators all in good condition. Write for prices. MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York 3, New York.

AT A SACRIFICE—Oven for drying compressors, 10 ft. long, 3 ft. wide, 5 1/2 ft. high, door opening 33 1/2" x 27 1/2" gauge galvanized iron exterior lined with 1 1/2" asbestos board, 5/8" steel plate floor, 4 1/2" x 3 1/2" I Beam on ceiling, full length of oven. Equipped with fifteen 500 watt, 230 volt, strip heaters split in 3 phases of 220 volts. Connections for pump-out compressor. Sale price, \$250.00. F.O.B. Omaha, Nebraska. SIBLEY COMPANY, 508 South 19th Street, Omaha, Nebraska.

ATTENTION SERVICEMEN—Send for our new catalog—on controls, valves, relays, brass fittings, V-belts—hermetic and open type units. All new merchandise at great savings up to 60%; sold on money back guarantee. WALTER W. STARR REFRIGERATION, 2833 Lincoln Ave., Chicago 13, Illinois.

USED EQUIPMENT for sale: One York 125 and One York 288 evp. conds. One Amer. Blw. 2 1/2 AHS Fan. Two Amer. Blw. 2 1/2 AHS Fan. Two 4 1/2 x 2 1/2 x 4 1/2 x 2 1/2, 4 Row 4 Fin/inch DE coils. Write offer or inquiry to: UNITED CLAY PRODUCTS COMPANY, 3055 V St., N.E., Washington 18, D. C., Phone LAwrence 6-7000.

FOR SALE: Surplus inventory. Triple-glazed display case glass units, sizes 24" x 36" panes 1/2" thick, to fit 8 ft. display cases. Packed six to a crate, brand new and in original crates, never opened. \$25.00 per unit, F.O.B. Philadelphia. BOX 4106, Air Conditioning & Refrigeration News.

BELOW DISTRIBUTOR'S cost. Brand new automatic ice machines, model SC-250. Produce 2,000 pounds of flaked-type ice daily. Nationally advertised brand. Must sacrifice. Will sell at below distributor cost. 3HP condensing systems—single, two and three-phase motors available. Act now. BOX 4113, Air Conditioning & Refrigeration News.

## EQUIPMENT WANTED

USED Air conditioners wanted by New York City contractor, prefer package type units 1/2 hp up to 10 hp capacity, in any condition. Will also consider new equipment. BOX 4107, Air Conditioning & Refrigeration News.

## MISCELLANEOUS

NORGE SEALED units remanufactured or exchanged. Immediate delivery from stock, 2 year warranty. Freon refrigerant. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Sets of three, \$1.15 plus postage. MODERN REFRIGERATION CO., Inc. 12541 E. McNichols Road, Detroit 5, Michigan.

## ASSISTANT SALES MANAGER

Well-known manufacturer of heating equipment with nation-wide distribution is looking for a man with proven sales and executive ability to work with our Sales Manager in the development of additional sales, particularly in the air conditioning field. The man we are looking for has his career still ahead of him. He knows air conditioning from having had actual field selling. It would be helpful if he were also familiar with wet heating systems. The location is Chicago. The compensation will be equal to the successful applicant's experience and ability. In replying, please include all details of past experience and salary requirement in first letter.

Box 4111, Air Conditioning & Refrigeration News

Genuine Joe says: "WAGNER Commutators are the 'Real McCoy'"

Wagner Commutators are best because they are precision built of the most carefully selected materials. Their rugged design provides strength and permits relacing with safety.



Wagner Electric Corporation  
4475 PLUMGATE AVENUE, SAINT LOUIS 18, MO., U. S. A.

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10-13-52



## OFF THE CHEST

### SOUTH AMERICAN FIRM REQUIRES UNIT PARTS

Refrigeracion Electrica Comercial  
E Industrial Argentina  
Buenos Aires

#### Editor:

We have pleasure in addressing ourselves to you in our capacity of industrialists of the refrigerating line, in order to inform you that we are interested in bringing to this country, from the United States, domestic refrigerator parts.

For some years now the official authorities of our country have refused to grant the importation of complete refrigerators, reason for which the import licenses are given only for complete or incomplete equipments and for some furniture parts which are not at present available here.

On our part we deal for more than 10 years now with the building of commercial, industrial, and domestic refrigerator cabinets, and with the setting up of frigorific chambers, using American equipments just bought from Tecumseh Products Co. of Michigan; Melchior, Armstrong, Dessau Co. of Delaware, Inc. (New Jersey), and Copeland Refrigeration Corp. of New York.

Notwithstanding this, we would like to build furnitures resembling in all the possible the American

models, considered as the best of the world, and by virtue of all this we wish to consult you if you would be willing to furnish us with some domestic cabinet parts as doors, frames, plastics, etc., for all of which we have been granted import licenses.

Besides, we would like also to build cabinets with your fabrication license; i.e., using molds and matrices which you would provide us and which we would buy from you, as well as blueprints and technical know-how. We will be very much obliged if you will give us your opinion in this regard, as well as your final conditions.

If this should not be the case, we might be interested in buying from you the matrices of your domestic models previous to the actual ones, that is to say which should have no immediate use or interest any more for you, but which would allow us to build a refrigerator model slightly older than yours.

Just in case that any one of our proposals should meet with your approval and interest, we may add that we would be willing to represent you in this country on an exclusive basis. To this end we would build the cabinet with your own matrices and molds, sketches and instructions, and we think that during the first months we might need the assistance of one of your technicians, who might work for some time in our factory.

As you will gather, we wish to face the building of cabinets based on the American technique, and backed by a serious and reliable firm as yours is.

On our part, we have to inform that we own an ample financial and technical capacity, all of which enables us to hold one of the first positions among the Argentine refrigerator builders, and our products have come to reach a level where they begin to stand out among other similar ones for their technique, structure, and outer good look.

Presently we own a large factory,

but are ready to set up a new industrial plant which may enable us to turn out some 10,000 units per annum.

So that you may be able to obtain some references about our firm, please address yourselves to the aforementioned firms, and you may include The Phoenix Shipping Co., Inc., 21 State St., New York, N. Y., and the Chase National Bank of the City of New York. Locally we operate with the following banks: de la Nacion Argentina, de Credito Industrial Argentino and de la Provincia de Buenos Aires.

If the aforementioned should merit your attention, please let us have your news at once, as in this case it is not a mere project but a serious attempt to materialize a scheme already worked out by our experts, and we need only the assurance of counting with the backing of a firm as important as yours.

We would also be interested in knowing whether you might wish to participate in the new industrial plant which we shall build at once through your financial assistance.

Finally we ask you please to inform us if you have heard of some plant for the building of cabinets which is bound to be sold, or special machines available to that end.

M. A. PARTOR y Montes  
Import Manager

### JAPANESE DESIGNER ASKS TECHNICAL AID

Kita-Ku, Nagoya  
Japan

#### Editor:

I am living in Nagoya of Japan, and then be employed in design division of Refrigeration Production Co.

I am twenty years old. I am sorry to trouble you, but I hope please send me bulletin of Key No. B-22, B-225, N-220, N-222, N-224, N-226, N-227, Refrigeration News, 1952-Feb.).

If possible send me catalog of room air conditioner and domestic refrigerator.

I shall be waiting for your letter with a craned neck. I hope you will help me in this connection.

TADAO KINOSHITA

### JAMES BYRNES IS GOVERNOR OF S. C.

Charleston, S. C.

#### Editor:

In "Inside Dope" in the Aug. 4 issue on page 6, you state: "Stevenson is a political protégé of North Carolina's Governor James Byrnes." I don't know about the "political protégé" part but I DO KNOW that James F. Byrnes is governor of South Carolina.

(Miss) ZILLA HINTON,  
S. C. Elec. & Gas Co.

### SHE LIKES IT!

Heatron, Inc.  
York, Pennsylvania

#### Editor:

Your column "Inside Dope" is very interesting and enjoyable.

MRS. D. GOLDEN

### PAUL REED ARTICLES HELPFUL, INTERESTING

Curtis, Morris & Safford  
60 East 42nd Street  
New York City 17, N. Y.

#### Editor:

I take this occasion to tell you that I have found Paul Reed's articles very interesting. The series on defrosting was particularly timely, and I found that it presented the various systems in a comprehensive and understandable manner.

HAROLD L. STULTS

### CHIEF ENGINEER

Rapidly expanding National Manufacturer of commercial and industrial refrigeration product has opening for Chief Engineer to head Engineering Division of Corporation. Full responsibility for Product Design, Production Engineering, Test Laboratory, Experimental and Inspection. This is a high-level management position.

Replies strictly confidential. Send resume to:  
Box 4097, Air Conditioning & Refrigeration News

### WANTS TO REPRINT EDITORIAL ON INFLATION

Frick Co., Inc.  
Waynesboro, Pa.

#### Editor:

We appreciated the editorial in your Sept. 1 issue captioned "Citizen Arguers: Here Are Bedrock Facts." May we have permission to reprint this in our local papers, as well as elsewhere, and in leaflet form for promiscuous distribution, all at our expense and giving credit for its origin? We think it a great piece of composition.

D. N. BENEDET,  
Pres. & Gen. Mgr.

### Dept. Store Sales Decline In Week and Year to Date

WASHINGTON, D. C.—The Federal Reserve Board reported that compared with like periods of 1951, department store sales declined 1% during the week ended Sept. 13, increased 1% in the four weeks ended the same day, and fell 2% for the year to date.

Sales were off in seven districts in the Sept. 13 week—Minneapolis (down 8%), New York and Kansas City (6%), Chicago and Cleveland (4%), St. Louis (3%), and Philadelphia (1%).

Increases were reported by the other five districts—Atlanta (up 10%), San Francisco (9%), Boston (8%), Richmond (5%), and Dallas (3%).

### Douglas Appointed M-H Valve Sales Manager

MINNEAPOLIS—J. M. Douglas has been named valve sales manager for the central region for Minneapolis-Honeywell Regulator Co. Douglas has served in industrial sales activities in the company's Syracuse, Albany, and New York City branches. He will make his headquarters at the company's Cleveland branch office.

For more  
**Ice maker  
SALES**  
... FILTRINE  
"Tartle-Mester"  
Demerolizer  
in the water line

Cuts Service  
No Tastes  
Clear Ice  
Fits All Makes  
Small Cost

Crystal ice... without sludge-forming rust, sediment, mineral residue... chlorine taste... "milkiness." Ends major source of service calls. Write for new literature.

**Filtrine**  
"Water Purifier and Filter for 40 Gallons"  
FILTRINE MANUFACTURING CO.  
BROOKLYN, N. Y.

**M&E**  
EST. 1886

**CASE COILS AND  
FINNED TUBE PRODUCTS**  
★ Unit Coolers ★ Unit Heaters  
WRITE FOR CATALOG  
**MERCHANT & EVANS CO.**  
PHILADELPHIA 46, PA.

### MISSING SOMETHING?

More and better useful information is yours for the asking. See "What's New" page.  
Use Key No. for fastest service.



## FINE HOTELS DEMAND FINE REFRIGERATION

*The world renowned Caribe Hilton Hotel,  
famous for its excellent cuisine,  
insists on McCall refrigerators*

The Caribe Hilton, one of the newest additions to the world-renowned Hilton organization, whose hotels are famous for their excellent cuisine—selected four McCall Stainless Steel Reach-ins (models 115, 92, 70, 45) for its modern, spotless kitchens. McCall was chosen for its versatility and built-in extras—durability—beauty—convenience—economy—all of which are necessary for maintaining the high efficiency of a Hilton Hotel restaurant. The Caribe Hilton, in choosing McCall, knew that proved quality was its only assurance of economy and service.

**McCall Versatility**—McCall is the only manufacturer in the industry who offers you a choice of three different finishes on all models: 1. genuine Dulux enamel, both durable and attractive—2. gleaming lifetime porcelain, baked in the McCall furnace to insure a unit of character and uniform McCall quality—3. the master choice of all; our heavy 18 gauge stainless steel with its high #4 polish—a true aristocrat. These finishes can also be used in conjunction with each other. Ex: any McCall pass-thru can be constructed with one front stainless steel, the other Dulux or porcelain.

**All Welded** one-piece interiors in units 15 cubic feet through 70 cubic feet.

Limited number of territories available to qualified firms.

Write for information.



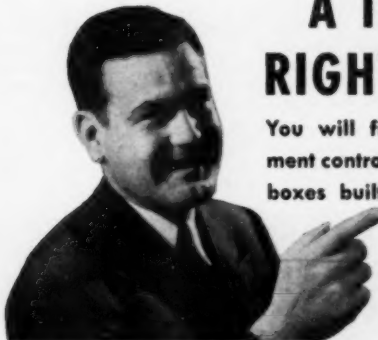
**REFRIGERATOR CORPORATION**  
Hudson, N. Y.

### SALES TRAINING DIRECTOR

National manufacturer of commercial & industrial refrigeration products has opening for a sales training director to organize a national program of hiring, training and management of sales personnel. Development of a sales training manual integral part of program. Extensive travel required. Outstanding opportunity for advancement in rapidly expanding sales organization. Replies confidential. Send resume to Box 4106, Air Conditioning & Refrigeration News.

## A THOUSAND RIGHT ANSWERS

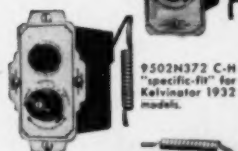
You will find "specific-fit" replacement control units for MORE than 1000 boxes built since 1925—in the C-H Refrigeration Control Line.



Just a few of the "specific-fit" controls in the unequalled Cutler-Hammer line.



9502N95 C-H "specific-fit" for Tagliabue models.



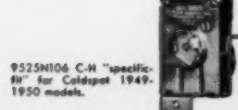
9502N372 C-H "specific-fit" for Kelvinator 1932 models.



9502N383 C-H "specific-fit" for Copeland 1937-1938 models.



9521N29 C-H "specific-fit" for Frigidaire 1936-37-38 models.



9525N106 C-H "specific-fit" for Coldspot 1949-1950 models.

No "modifying," no fussing, no delay when you answer service calls with C-H "specific-fit" replacement control units. You take out the old, put in the new... and you are through! It's the easy, sure way to do the job right because Cutler-Hammer has manufactured such "specific-fit" units for more than 1,000 models of refrigerators built since 1925. And you'll also quickly see how the widely-known Cutler-Hammer name (advertised in The Saturday Evening Post, Time, Newsweek, American Home, Better Homes & Gardens, House & Garden, etc.) builds customer confidence and good will. Do not forget, this C-H refrigeration control line includes the popular general purpose two-button replacement unit (Type 9502) which incorporates dependable motor overload protection.

**NEW CATALOG.** New 1952 C-H Refrigeration Catalog has 16 pages new material, 64 pages altogether. More "specific-fit" replacement units. 90 different box manufacturers listed and the C-H control to fit. Get a free copy and the control items you need through your authorized C-H refrigeration wholesaler. CUTLER-HAMMER, Inc., 1362 St. Paul Avenue, Milwaukee 1, Wis.



Featured by Cutler-Hammer refrigeration wholesalers and recommended by alert service dealers from coast to coast.



## D. A. Packard--

(Concluded from Page 1, Column 8)  
vice president in charge of Kelvinator sales to his present general administration and policy-making post.

The executive moves were made necessary by Nash-Kelvinator's steady postwar growth and plans for broadening its major appliance lines, Lawson said. Within the past year, Nash-Kelvinator has acquired new electric range-building facilities, and controlling interest in the ABC laundry equipment firm.

Packard assumes general sales responsibility for Kelvinator after 27 years' experience as a factory and field sales executive with leading companies in the appliance field. A widely-quoted speaker, he is recognized as a top authority on merchandising and sales management.

He joined Kelvinator 13 years ago as eastern sales manager, became assistant general sales manager four years later, and household sales manager in 1947.

A veteran of 30 years' experience in retailing and appliance merchandising, Keuping joined Kelvinator as New York zone comptroller in 1940. He moved to Detroit headquarters the following year and has served as the company's sales operations manager since 1947.

Coward has been a member of the corporation staff since 1940, serving as director of advertising and sales promotion until he assumed his present title two years ago. His new responsibilities include marketing and supervision of a new product development department.

Leonard sales manager since 1941, Jeffrey joined the Kelvinator organization in 1930, shortly after graduation from college. In addition to his new duties as sales manager of refrigeration and range products, he will continue to supervise activities of the Leonard Div.

Travis entered the appliance field in 1927, and joined Kelvinator in 1943. He has been western regional manager since 1947. He assumes responsibility for programs dealing with the development of the Kelvinator dealer organization, including public utility, department store and furniture store activities. In addition, he will be responsible for Kelvinator's new laundry equipment division.

Active in the appliance selling field for more than 30 years, Valencourt joined Kelvinator in 1946 as eastern regional manager. He will be responsible for activities of Kelvinator's eastern, western, and Pacific Coast

## NPA To Relax--

(Concluded from Page 1, Column 4)  
issued now so that builders may do preliminary planning for future construction and place advance orders with suppliers. However, deliveries of new quantities of controlled materials cannot be made until after May 1.

In another action NPA revoked order M-100, the housing order, and incorporated its provisions in CMP Reg. 6.

Among the provisions on Direction 8 are these:

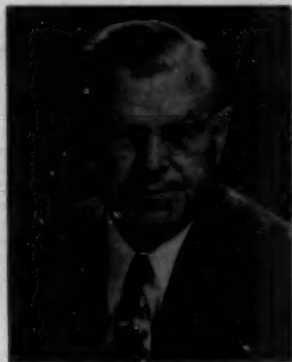
1. For recreational, entertainment, and amusement construction, builders may self-allot per project per quarter: 5 tons of carbon steel (not to include more than 2 tons of structural shapes), 500 lbs. of copper and copper base alloys, and 300 lbs. of aluminum. Foreign and used steel will be permitted for recreational constructions in accordance with article 6 of the regulation.

2. For all other non-residential construction other than highways, builders may self-allot per project per quarter: 25 tons of carbon and alloy steel, including structural (not to include more than 2½ tons of alloy and no stainless), 5,000 lbs. of copper, and 4,000 lbs. of aluminum.

3. There will be no change in self-authorization for industrial construction except that self-authorization of 1 ton of stainless steel per project per quarter will be permitted for chemical plants.

4. The prohibition on self-certification for wide flange beams and sections for all categories of construction will be removed.

Effective immediately, sections 9 and 23 of CMP Reg. 6 are amended to add schools and hospitals to those categories of construction which are allowed to use DO ratings for purchase of such consumer goods items as furniture, stoves, and refrigerators.



D. A. PACKARD

regional managers and their organizations.

Experienced in the automobile and appliance sales fields, Demmer joined Kelvinator in 1938. After assignments in wholesale sales, sales management, and sales training, he directed the marketing and organization department at Detroit headquarters from 1947 to the present.

Howell joined Kelvinator in 1947 after 13 years' factory sales experience in the appliance industry. He has served for the past two years as home freezer sales manager. Worden entered the Kelvinator advertising department in 1936, after four years' experience in appliance sales promotion, and has been assistant advertising and sales promotion manager since 1950.

With Kelvinator since 1926, Johnson was manager of the company's Cincinnati zone office from 1946 to 1951, when he was transferred to Detroit headquarters as special products sales manager.

Kronauge entered the appliance business in 1933, joined Kelvinator 11 years later, and has been manager of used refrigerator sales since 1949. He will continue to supervise used refrigerator activity in his new post.

Runkle entered the retail field in 1940, and joined Kelvinator's marketing and organization department in 1946 after 3½ years' military service in World War II. He was appointed assistant manager of the department earlier this year.

## RACCA Meeting--

(Concluded from Page 1, Column 5)  
meeting at the Miami Municipal Auditorium.

Luncheon speaker on Thursday will be R. B. Roberts, Jr., vice president of the Florida Power & Light Co. He will talk of "Building an Economy with Air Conditioning."

Subjects to be covered at the general sessions will include "Heating and Air Conditioning" by E. A. Cline, general sales manager of The Trane Co., "The Future of Self-Service Meats," and "Frozen Foods."

RACCA announced that its guests at the Casablanca hotel will be able to secure rooms at \$6 per single room and \$8 per double room per day. The same daily rate will be extended to these guests until Dec. 15.

## Blood Storage--

(Concluded from Page 1, Column 3)  
since the serum has to be stored in temperatures ranging from 35° to 50° F., to maintain its effectiveness, NARW said.

Eventually, according to Civil Defense officials, the blood serum is expected to be stockpiled in 47 major cities, strategically located throughout the country.

Civil Defense has expressed appreciation for the patriotic response of the refrigerating warehousing industry, and in addition, expressed their gratitude for the many responses from other warehousemen who said they would be glad to cooperate.

## GECC Opens Chicago Office To Serve Northern Illinois

CHICAGO—The General Electric Credit Corp. has announced the opening of its third new midwest office within four months to meet a rapidly growing volume of business.

R. R. Campbell, central district manager, said the new office, at 837 S. Clinton St., Chicago, will serve dealers in northern Illinois outside of Chicago. He announced the appointment of Raymond H. Mathisen as manager of the new office.

## Frigidaire Freezers--

(Concluded from Page 1, Column 4)  
tion, is said to be extremely effective in keeping heat and moisture out and maintaining 0° F. temperatures. Moisture will not condense on the top, the company said, eliminating the need for built-in electric heaters to keep it dry. The top is also counterbalanced.

A freezing compartment on the right side of the box is refrigerated on the sides and bottom. Sliding storage baskets are standard equipment on both models. The larger model is equipped with movable dividers to provide easier stacking of the 461 lbs. of food which it holds. The smaller freezer has a 322-lb. capacity.

Both freezers are equipped with a neon safety light mounted in a target-like reflector at the front of the cabinet. Although the lamp glows continuously indicating that foods are safely stored at 0° F., on the average only about six cents worth of current is used each year, Lehman further asserted.

An interior light, recessed in the freezer top, automatically floods the storage compartment with light when the top is opened. The top is also equipped with a lock.

Cabinets are of all steel construction with sealed insulation. Concealed cooling coils are built into the front, back, and sides of the cabinet. They are spaced closer together at the top so that foods there are stored at the same temperature as those at the bottom.

There are 4 in. of fibrous glass insulation around the walls and bottom of the storage compartment in addition to the 5 in. in the top. A five-



REDUCED operating costs, lower freezing temperatures, and more convenient frozen food storage facilities are claimed for the new Frigidaire food freezers. The model shown here with 9.2 cu. ft. of storage space will store up to 322 lbs. of frozen food.

year warranty covers the "Meter-Miser" mechanism.

Both freezers measure 36 in. high and 31 in. deep. The HR-92 is 53½ in. wide and the HR-132 is 70½ in. wide. Both have baked-on enamel.

## Market Installs New Cases

ROCHESTER, N. Y.—New refrigerated dairy and frozen food cases have been installed in the newly remodeled Wegmans supermarket here.

## Wisner, Emery Associate, Dies In Nashville at 39

NASHVILLE, Tenn.—Richard Wisner, who had been associated for more than five years with Reube O. Emery, United States Air Conditioning Corp. representative, died recently of a heart attack in Vanderbilt hospital here. He was 39.

Surviving Wisner are his wife and two children.

*You sell more because you offer more with the ...*



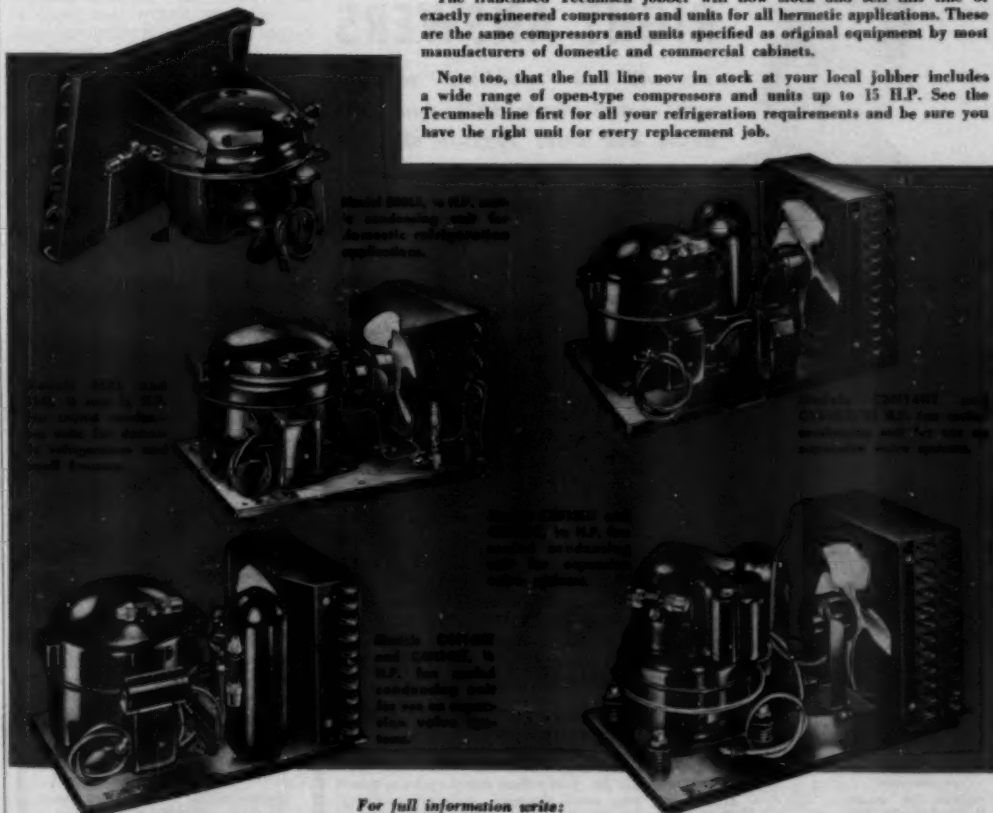
## Complete line of JOBBER HERMETICS

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Note too, that the full line now in stock at your local jobber includes a wide range of open-type compressors and units up to 15 H.P. See the Tecumseh line first for all your refrigeration requirements and be sure you have the right unit for every replacement job.



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